

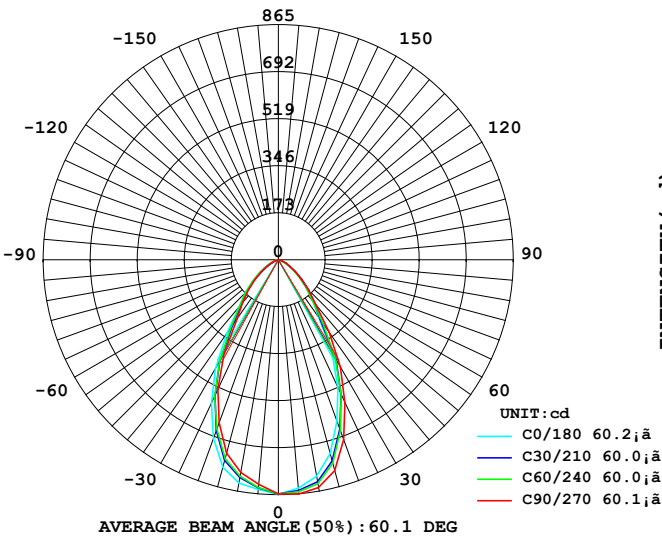
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

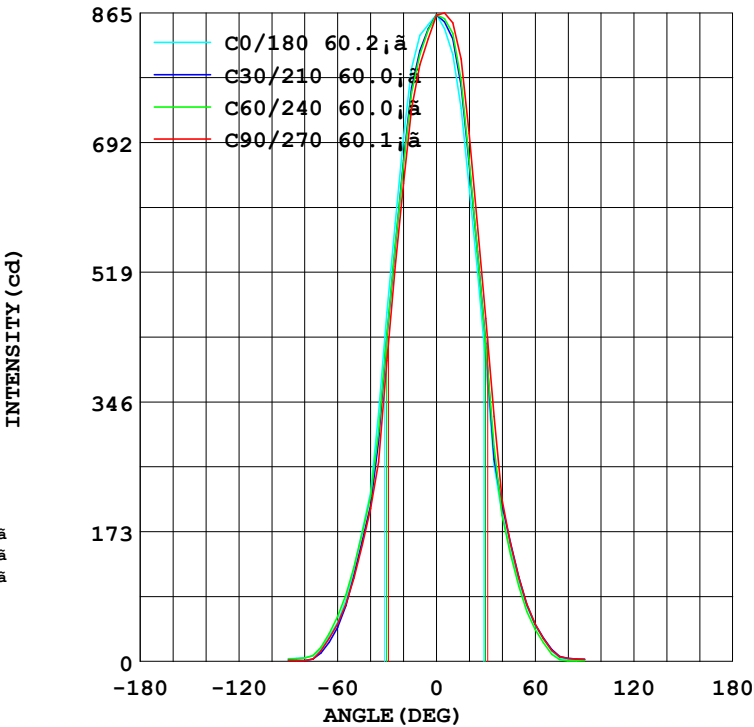
MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

DATA OF LAMP		Imax (cd)	864.6	S/MH (C0/180)	0.94
MODEL	TRION DUO	EFFICIENCY (%)	100.0	S/MH (C90/270)	0.87
NOMINAL POWER (W)	15	TOTAL FLUX (lm)	968.72	Voltage (V)	219.6
RATED VOLTAGE (V)	220	EFFICIENCY (lm/W)	64.6	Current (A)	0.073
NOMINAL FLUX (lm)	968.7	η up (%)	0.0	Power (W)	15.00
LAMPS QUANTITY	1	η down (%)	100.0	Power Factor (PF)	0.952
TEST VOLTAGE (V)	219.7	Effictive Flux (lm)	893.2	EEI	0.214

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

Color Temperature Data List

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

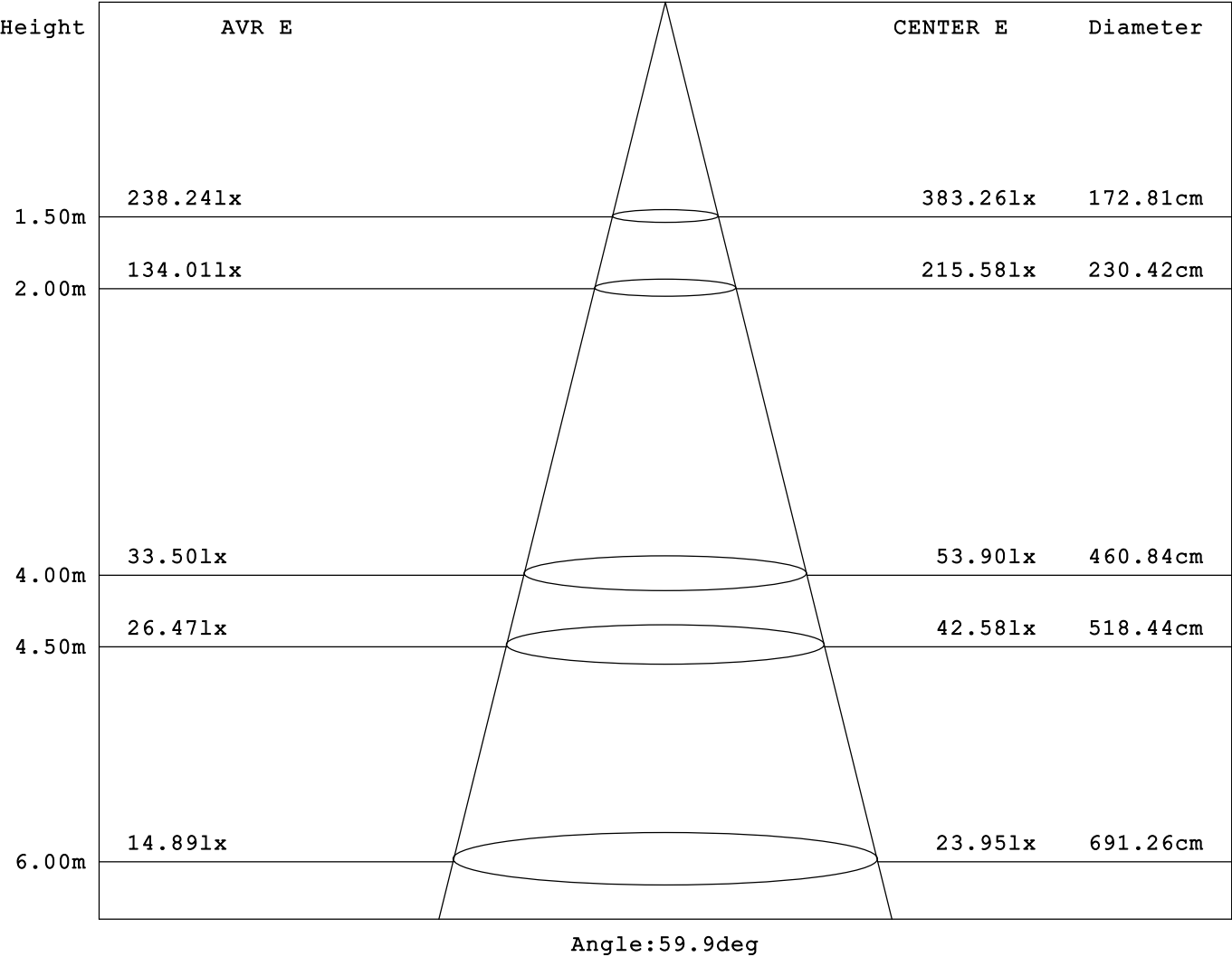
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
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AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi, 301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
10.0	834.7	811.7	795.2	795.8	809.1	833.4	851.4	846.3	0- 10	80.11	80.11
20.0	698.8	665.5	637.3	625.9	632.5	665.8	703.6	714.2	10- 20	212.4	292.6
30.0	465.0	433.6	400.9	392.5	397.3	422.3	456.9	469.3	20- 30	252.3	544.9
40.0	224.8	213.9	203.5	201.1	196.0	201.3	215.0	218.9	30- 40	190.3	735.3
50.0	124.0	120.0	110.9	110.5	107.0	106.4	112.0	114.2	40- 50	122.8	858.2
60.0	52.43	52.61	50.17	49.50	48.01	46.29	50.08	47.02	50- 60	70.17	928.3
70.0	16.87	15.20	14.07	14.75	13.89	12.77	14.62	12.86	60- 70	30.54	958.9
80.0	4.693	2.888	1.263	2.797	2.256	2.481	3.880	2.436	70- 80	7.093	966.0
90.0	3.700	2.481	1.444	2.391	3.339	1.940	2.797	1.940	80- 90	2.711	968.7
100.0									90-100		
110.0									100-110		
120.0									110-120		
130.0									120-130		
140.0									130-140		
150.0									140-150		
160.0									150-160		
170.0									160-170		
180.0									170-180		
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
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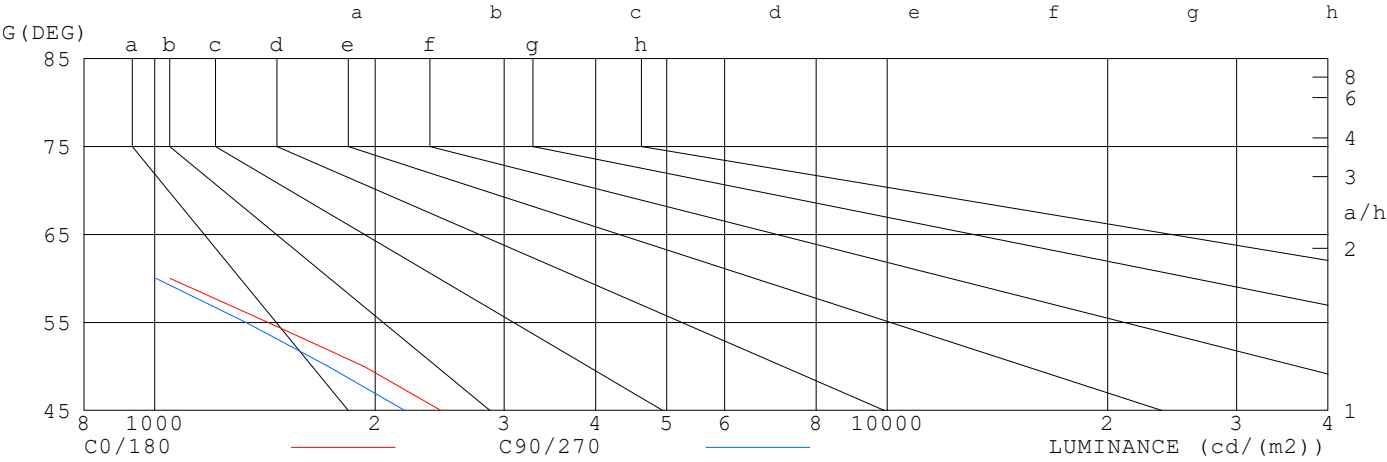
LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		2000	1000	500	<=300				
1.15	A								
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/m2

G (DEG)	C0/180	C90/270
85	466	114
80	270	73
75	282	129
70	493	412
65	792	728
60	1049	1004
55	1429	1333
50	1931	1726
45	2461	2195

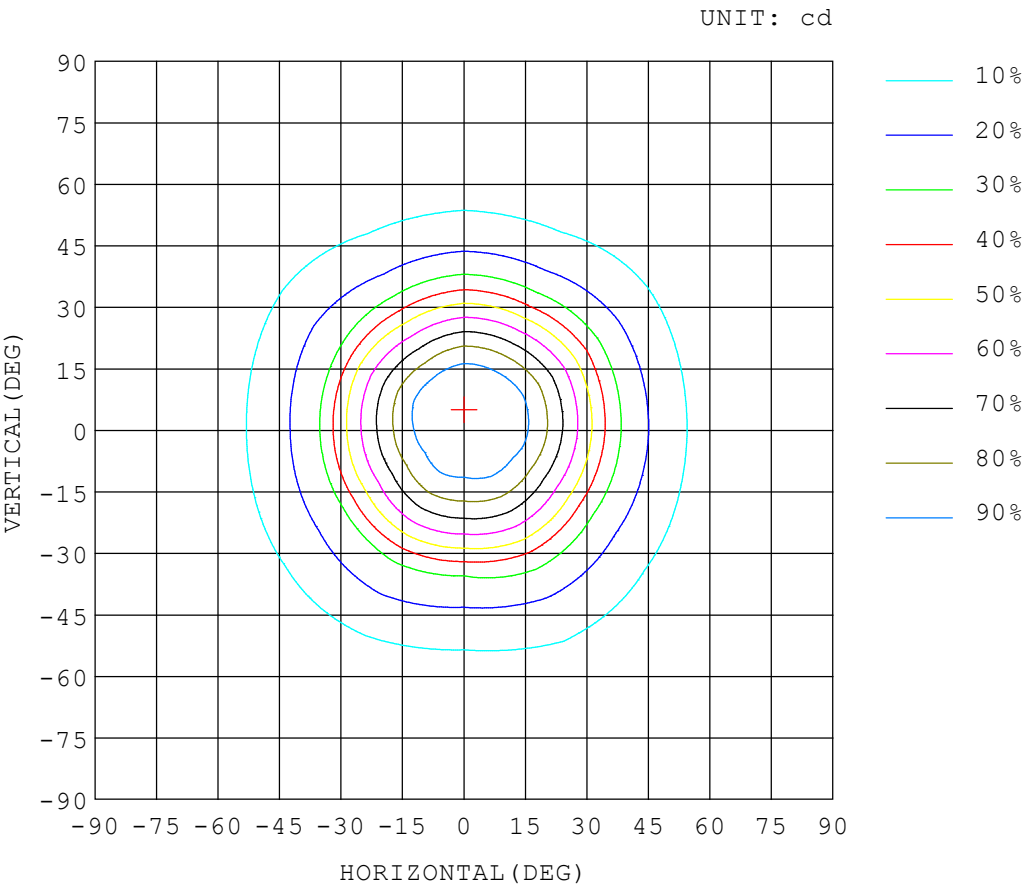
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
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Remarks: 4000K

ISOCANDELA DIAGRAM

Report number:

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Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:



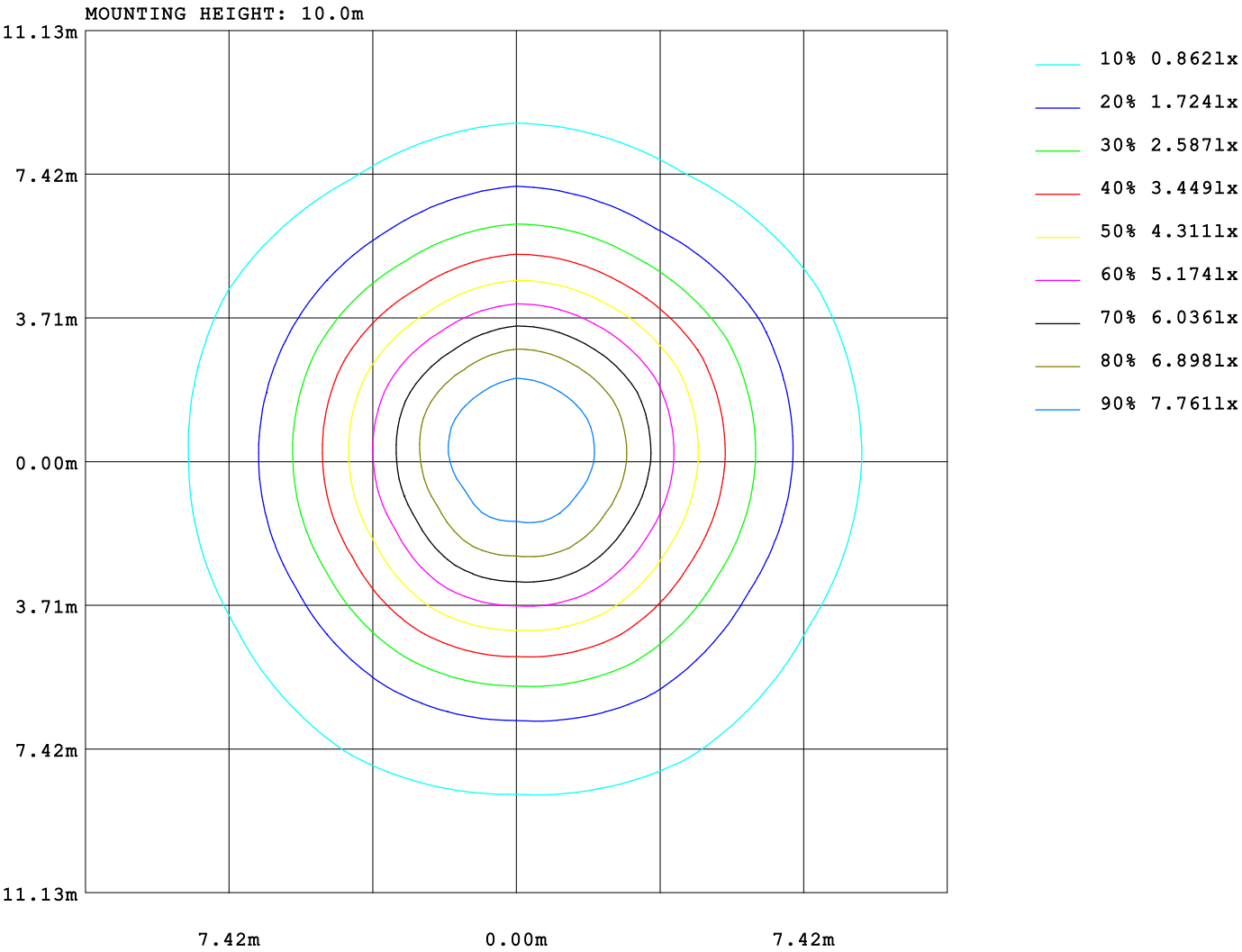
Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

ISOLUX DIAGRAM

Report number:

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Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

AREA LUMINOUS FLUX

Report number:

MANUFACTURER: DIVINITY LIGHTS																			
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019																			
NAME: TRION DUO										TYPE: 4000K CRI-90					WEIGHT:				
SPECIFICATION:										DIMENSION: D-182 CUTOUT-158 H-86 MM					SERIAL No.:				

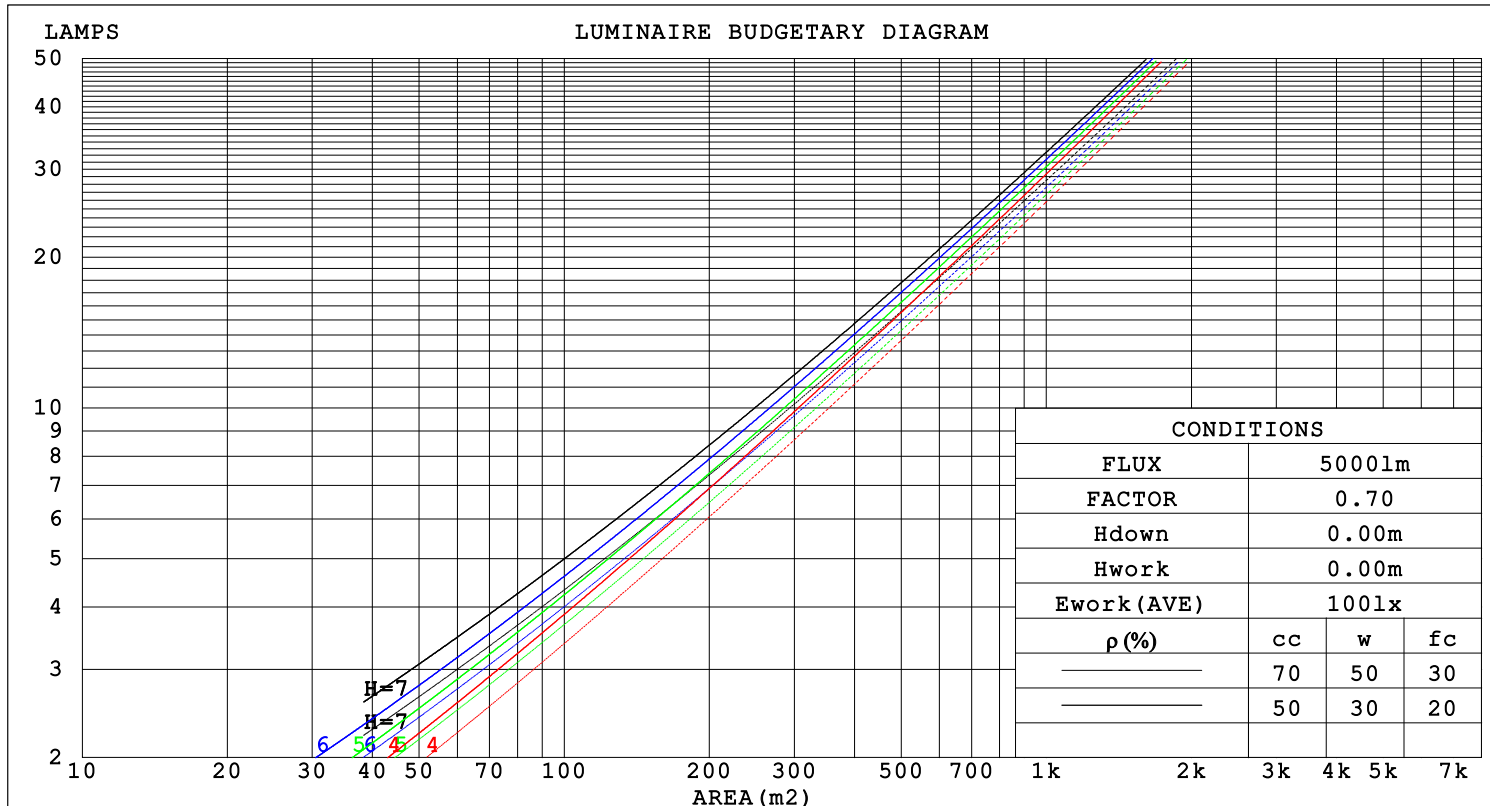
VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm		Φ t	Φ a
	0.01	0.02	0.04	0.05	0.04	0.03	0.03	0.06	0.09	0.09	0.06	0.03	0.03	0.04	0.05	0.04	0.03	0.01	0.75	0.00		
90																						
80																						
70																						
60																						
50																						
40																						
30																						
		</																				

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

Report number:

pcc	80%			70%			50%			30%			10%			0														
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
p _{fc}	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Coefficients of Utilization(CU)														
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00														
1.0	1.09	1.06	1.04	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.96	.94	.93	.91														
2.0	.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.86	.84	.82														
3.0	.91	.86	.81	.90	.85	.80	.87	.83	.79	.85	.81	.78	.82	.79	.76	.75														
4.0	.84	.78	.73	.83	.77	.72	.81	.76	.71	.79	.74	.71	.77	.73	.70	.68														
5.0	.78	.71	.66	.77	.70	.66	.75	.69	.65	.73	.68	.64	.71	.67	.64	.62														
6.0	.72	.65	.60	.71	.65	.60	.70	.64	.60	.68	.63	.59	.67	.62	.59	.57														
7.0	.67	.60	.55	.66	.60	.55	.65	.59	.55	.64	.58	.54	.62	.58	.54	.53														
8.0	.63	.56	.51	.62	.55	.51	.61	.55	.51	.60	.54	.50	.59	.54	.50	.49														
9.0	.59	.52	.47	.58	.52	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.45														
10.0	.55	.49	.44	.55	.48	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42														



Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

WEC AND CCEC

Report number:

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NAME: TRION DUO							TYPE: 4000K CRI-90					WEIGHT:		
SPECIFICATION:							DIMENSION: D-182 CUTOUT-158 H-86 MM					SERIAL No.:		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.209	.119	.038	.202	.115	.037	.190	.109	.035	.178	.103	.033	.167	.097	.031	
2.0	.202	.111	.034	.196	.108	.033	.185	.103	.032	.175	.098	.031	.166	.094	.030	
3.0	.192	.102	.031	.187	.100	.030	.178	.096	.029	.169	.093	.028	.161	.089	.028	
4.0	.182	.095	.028	.178	.093	.028	.170	.090	.027	.162	.087	.026	.155	.084	.026	
5.0	.173	.088	.025	.169	.087	.025	.162	.084	.025	.155	.082	.024	.149	.079	.024	
6.0	.164	.082	.023	.160	.081	.023	.154	.079	.023	.148	.077	.023	.142	.075	.022	
7.0	.155	.077	.022	.152	.076	.022	.146	.074	.021	.141	.072	.021	.136	.071	.021	
8.0	.147	.072	.020	.145	.071	.020	.140	.070	.020	.135	.068	.020	.130	.067	.019	
9.0	.140	.068	.019	.138	.067	.019	.133	.066	.019	.129	.065	.018	.125	.063	.018	
10.0	.134	.064	.018	.131	.063	.018	.127	.062	.018	.123	.061	.017	.120	.060	.017	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.142	.148	.135	.122	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.038	.017	.015	.013	
3.0	.150	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.140	.099	.068	.120	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.132	.088	.056	.114	.076	.049	.078	.053	.034	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.046	.108	.069	.040	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.102	.062	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.064	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.010	.012	.007	.003	

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

Uncorrected UGR Table

Report number:

MANUFACTURER: DIVINITY LIGHTS										
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi, 301019										
NAME: TRION DUO					TYPE: 4000K CRI-90			WEIGHT:		
SPECIFICATION:					DIMENSION: D-182 CUTOUT-158 H-86 MM			SERIAL No.:		

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	12.1	13.3	12.4	13.4	13.6	12.3	13.4	12.5	13.6	13.8
3H	12.2	13.2	12.5	13.4	13.7	12.4	13.4	12.6	13.6	13.8
4H	12.1	13.1	12.4	13.4	13.6	12.3	13.3	12.6	13.5	13.7
6H	12.1	13.0	12.4	13.2	13.5	12.2	13.1	12.5	13.4	13.6
8H	12.1	12.9	12.4	13.2	13.5	12.2	13.0	12.5	13.3	13.6
12H	12.1	12.9	12.4	13.2	13.5	12.1	13.0	12.4	13.2	13.5
4H 2H	12.2	13.2	12.5	13.4	13.6	12.3	13.3	12.6	13.5	13.8
3H	12.3	13.1	12.6	13.4	13.7	12.5	13.3	12.8	13.6	13.9
4H	12.2	13.0	12.6	13.3	13.6	12.4	13.2	12.8	13.5	13.8
6H	12.2	12.8	12.5	13.2	13.5	12.3	13.0	12.7	13.3	13.7
8H	12.1	12.8	12.5	13.1	13.5	12.3	12.9	12.7	13.3	13.6
12H	12.2	12.7	12.6	13.1	13.5	12.3	12.8	12.7	13.2	13.6
8H 4H	12.1	12.7	12.5	13.1	13.5	12.3	12.9	12.7	13.3	13.6
6H	12.1	12.6	12.5	13.0	13.4	12.2	12.7	12.7	13.1	13.6
8H	12.0	12.5	12.5	12.9	13.4	12.2	12.7	12.7	13.1	13.5
12H	12.1	12.5	12.6	12.9	13.4	12.2	12.6	12.7	13.0	13.5
12H 4H	12.1	12.6	12.5	13.0	13.4	12.2	12.8	12.7	13.2	13.6
6H	12.0	12.5	12.5	12.9	13.3	12.2	12.6	12.6	13.1	13.5
8H	12.0	12.4	12.5	12.8	13.3	12.2	12.6	12.7	13.0	13.5

Variations with the observer position at spacings:

S = 1.0H	+ 1.2 / - 1.9	+ 1.2 / - 1.7
1.5H	+ 1.1 / - 2.0	+ 0.8 / - 1.3
2.0H	+ 2.9 / - 3.3	+ 2.0 / - 2.2

CIE Pub.117 Corrected 968.7 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.1)

Test System: HOPOO HPG1800
Temperature: 25.3 DEG
Operators:
Test Date: 09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 9.500 m
Remarks: 4000K

UTILIZATION FACTORS TABLE

Report number:

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Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019										
NAME: TRION DUO					TYPE: 4000K CRI-90			WEIGHT:		
SPECIFICATION:					DIMENSION: D-182 CUTOUT-158 H-86 MM			SERIAL No.:		

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	76	68	63	76	68	63	75	67	63	58
0.80	85	77	72	84	77	72	83	76	72	67
1.00	92	84	79	91	84	79	89	84	79	74
1.25	97	90	86	96	89	85	94	88	84	79
1.50	101	94	90	99	93	89	97	92	88	83
2.00	105	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	104	101	98	91
4.00	112	108	105	109	106	104	106	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004					Suspended				SHRNOM = 1.25	

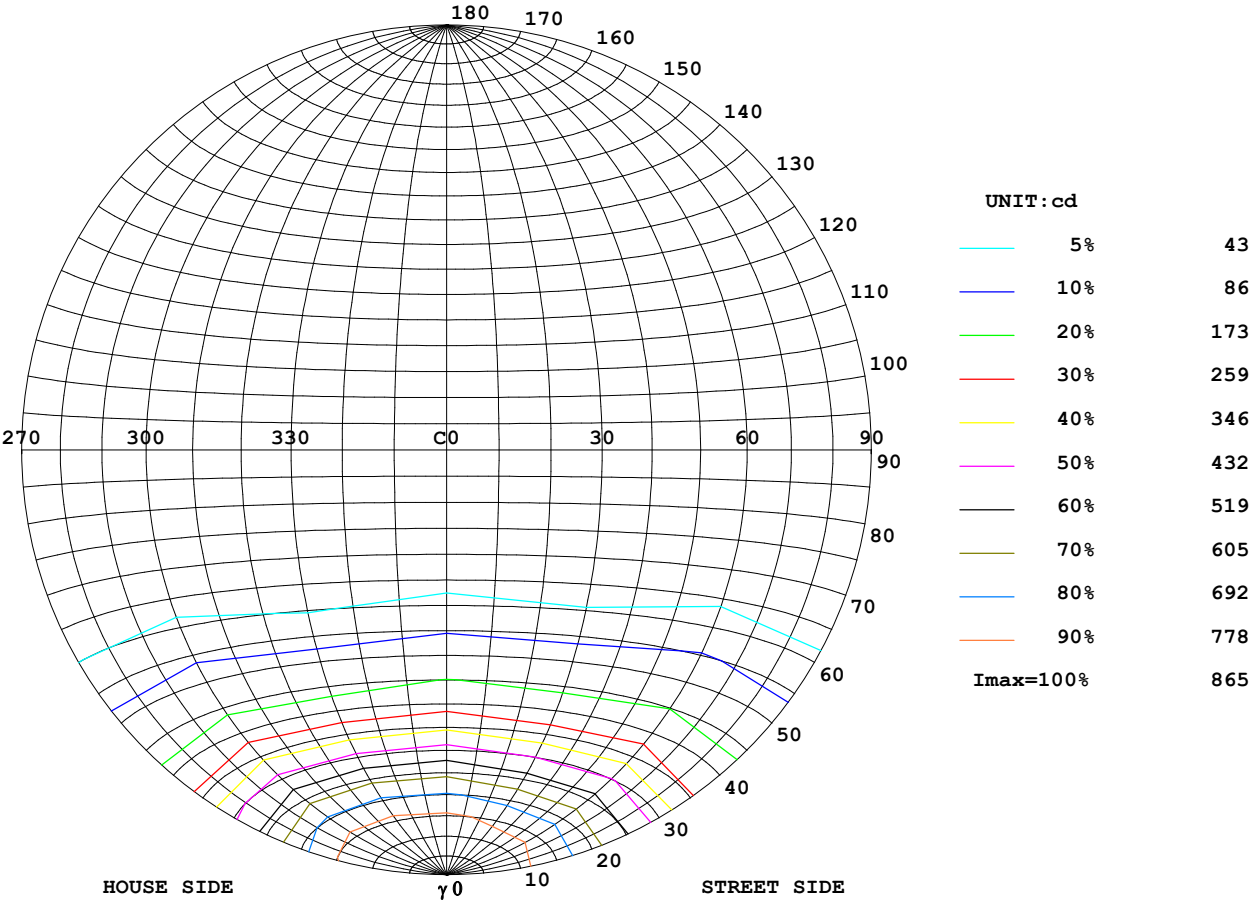
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 Operators:
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ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:



Test System:HOP00 HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
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ISOLUX DIAGRAM

Report number:

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NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

ILLUMINANCE AT MH=10 m,Enadir = 8.62 lx



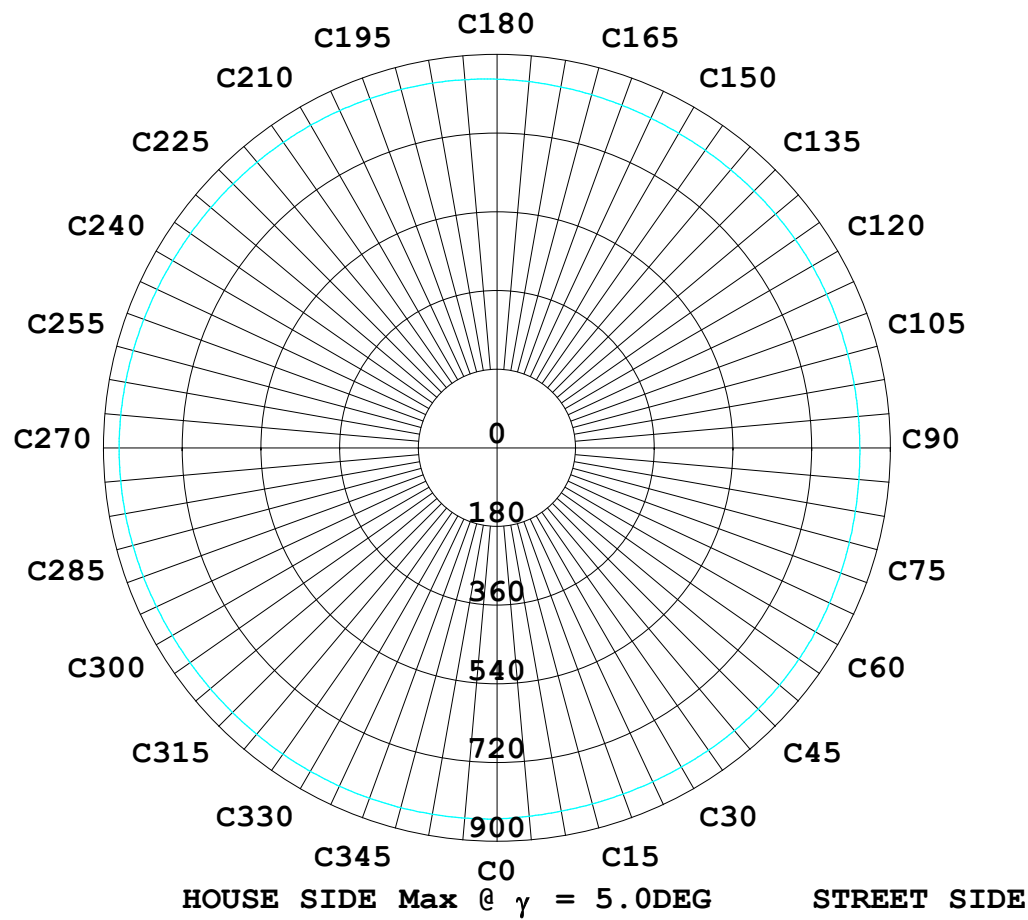
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Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:



Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:9.500 m
Remarks: 4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: DIVINITY LIGHTS		
Address: Plot No-A-89, RIICO Industrial Area, Karoli, Bhiwadi,301019		
NAME: TRION DUO	TYPE: 4000K CRI-90	WEIGHT:
SPECIFICATION:	DIMENSION: D-182 CUTOUT-158 H-86 MM	SERIAL No.:

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330
0.0	862	862	862	861	863	861	862	862	862	861	863	861
5.0	849	843	841	830	833	831	844	853	857	865	858	854
10.0	835	814	809	795	800	792	809	830	837	851	847	846
15.0	791	765	758	737	739	720	737	767	775	803	802	808
20.0	699	668	663	637	639	613	633	663	668	704	707	721
25.0	584	552	555	527	529	502	520	547	546	582	584	606
30.0	465	433	435	401	403	382	397	424	421	457	455	484
35.0	331	294	306	266	270	247	262	270	286	327	313	351
40.0	225	208	220	204	210	193	196	208	195	215	206	232
45.0	174	161	171	155	164	145	147	158	143	157	151	173
50.0	124	114	126	111	117	104	107	113	100	112	105	124
55.0	81.9	74.4	88.8	76.4	79.8	70.8	73.4	76.1	66.9	76.7	67.7	81.1
60.0	52.4	45.4	59.7	50.1	52.7	46.2	48.0	49.7	42.8	50.0	40.8	53.1
65.0	33.4	25.6	37.3	30.7	33.3	27.8	30.0	31.3	25.0	30.5	22.3	33.8
70.0	16.8	11.3	19.0	14.0	17.5	11.9	13.8	15.8	9.65	14.6	9.02	16.6
75.0	7.31	3.06	7.76	3.33	7.31	2.88	4.33	6.58	2.16	6.22	2.16	6.58
80.0	4.69	1.26	4.51	1.26	4.51	1.08	2.25	4.15	0.81	3.88	0.72	4.15
85.0	4.06	1.35	3.79	0.99	3.61	1.17	2.25	3.33	0.72	3.33	0.63	3.33
90.0	3.70	1.71	3.24	1.44	3.24	1.53	3.33	2.88	0.99	2.79	0.99	2.88

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:09-16-2025

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
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