

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P293156

Luminaire Tested: **24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7510.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

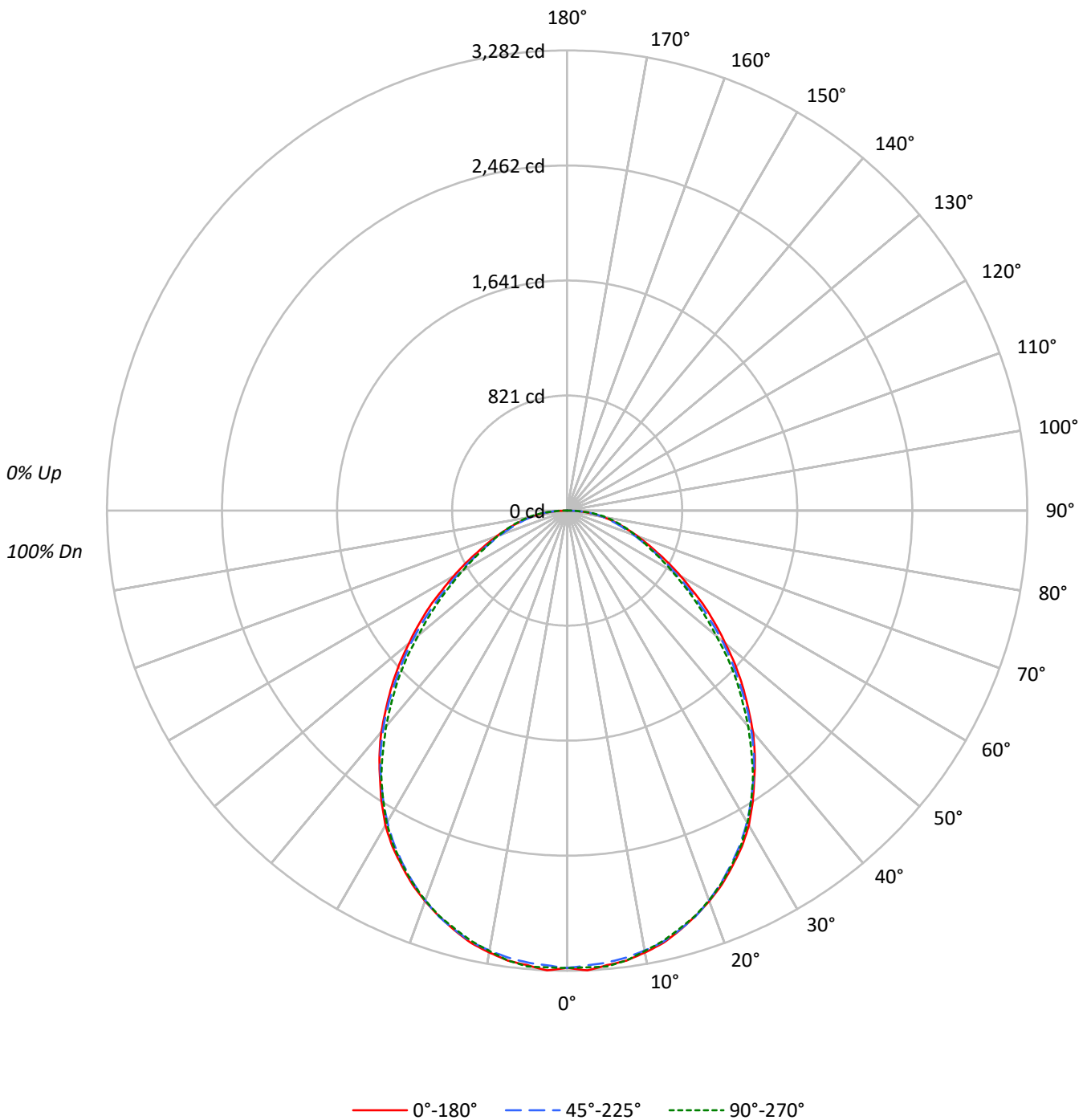
Input Watts (W): 63.612
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293156

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P293156

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4389	4389	4389
5°	4395	4370	4408
10°	4372	4353	4358
15°	4317	4313	4302
20°	4245	4236	4236
25°	4146	4123	4132
30°	4026	3985	3997
35°	3824	3806	3796
40°	3621	3589	3526
45°	3366	3307	3242
50°	3084	3015	2902
55°	2816	2689	2598
60°	2509	2389	2326
65°	2259	2140	2111
70°	2096	1968	2048
75°	2005	1917	2077
80°	2005	2005	2221
85°	2081	2104	2343



TEST NUMBER: P293156

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.1	4.1
10°-20°	871.8	11.6
20°-30°	1279.5	17.0
30°-40°	1446.6	19.3
40°-50°	1337.0	17.8
50°-60°	1030.1	13.7
60°-70°	682.1	9.1
70°-80°	406.1	5.4
80°-90°	148.8	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2459.5	32.7
0°-40°	3906.1	52.0
0°-60°	6273.1	83.5
0°-90°	7510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7510.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3262	3262	3262	3262	3262	
5°	3254	3254	3236	3237	3264	309
15°	3100	3093	3096	3095	3089	874
25°	2793	2785	2777	2774	2784	1286
35°	2328	2325	2317	2306	2311	1457
45°	1769	1757	1738	1707	1704	1363
55°	1200	1176	1146	1115	1108	1071
65°	709	699	672	666	663	711
75°	386	376	369	386	400	411
85°	135	127	136	150	152	143
90°	0	0	0	0	0	



TEST NUMBER: P293156

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L92765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3262.2	3262.2	3262.2	3262.2	3262.2
2.5°	3282.3	3265.3	3246.7	3246.7	3260.6
5°	3254.4	3254.4	3235.8	3237.4	3263.7
7.5°	3237.4	3228.1	3215.7	3215.7	3235.8
10°	3200.2	3192.5	3186.3	3183.2	3189.4
12.5°	3159.9	3147.5	3152.2	3147.5	3146.0
15°	3099.5	3093.3	3096.4	3094.9	3088.7
17.5°	3034.5	3031.4	3037.6	3026.7	3031.4
20°	2964.8	2955.5	2958.6	2952.4	2958.6
22.5°	2885.8	2879.6	2871.8	2864.1	2876.5
25°	2792.8	2785.1	2777.3	2774.2	2783.5
27.5°	2699.9	2687.5	2676.6	2673.6	2687.5
30°	2591.5	2577.5	2565.1	2562.0	2572.9
32.5°	2462.9	2459.8	2444.3	2438.1	2442.8
35°	2328.1	2325.0	2317.3	2306.4	2311.1
37.5°	2199.6	2198.0	2187.2	2168.6	2156.2
40°	2061.7	2050.9	2043.1	2016.8	2007.5
42.5°	1909.9	1906.8	1892.9	1863.4	1852.6
45°	1768.9	1756.6	1738.0	1707.0	1703.9
47.5°	1623.3	1606.3	1589.3	1550.5	1549.0
50°	1473.1	1460.7	1440.6	1401.8	1386.3
52.5°	1333.7	1316.6	1288.8	1251.6	1243.8
55°	1200.5	1175.7	1146.3	1115.3	1107.5
57.5°	1058.0	1047.1	1011.5	986.7	977.4
60°	932.5	923.2	887.6	864.3	864.3
62.5°	819.4	805.5	774.5	759.0	759.0
65°	709.4	698.6	672.3	666.1	663.0
67.5°	614.9	601.0	582.4	580.9	588.6
70°	532.9	515.8	500.3	515.8	520.5
72.5°	455.4	444.6	430.6	450.8	460.0
75°	385.7	376.4	368.7	385.7	399.6
77.5°	322.2	312.9	312.9	331.5	343.9
80°	258.7	252.5	258.7	274.2	286.6
82.5°	198.3	193.6	201.4	216.9	224.6
85°	134.8	127.0	136.3	150.3	151.8
87.5°	63.5	62.0	68.2	77.4	75.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)