

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: P292950

Luminaire Tested: **24GR-LD5-85-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292950
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-L83050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8289.0 lumens
Efficiency: N/A
Efficacy: 132.8 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

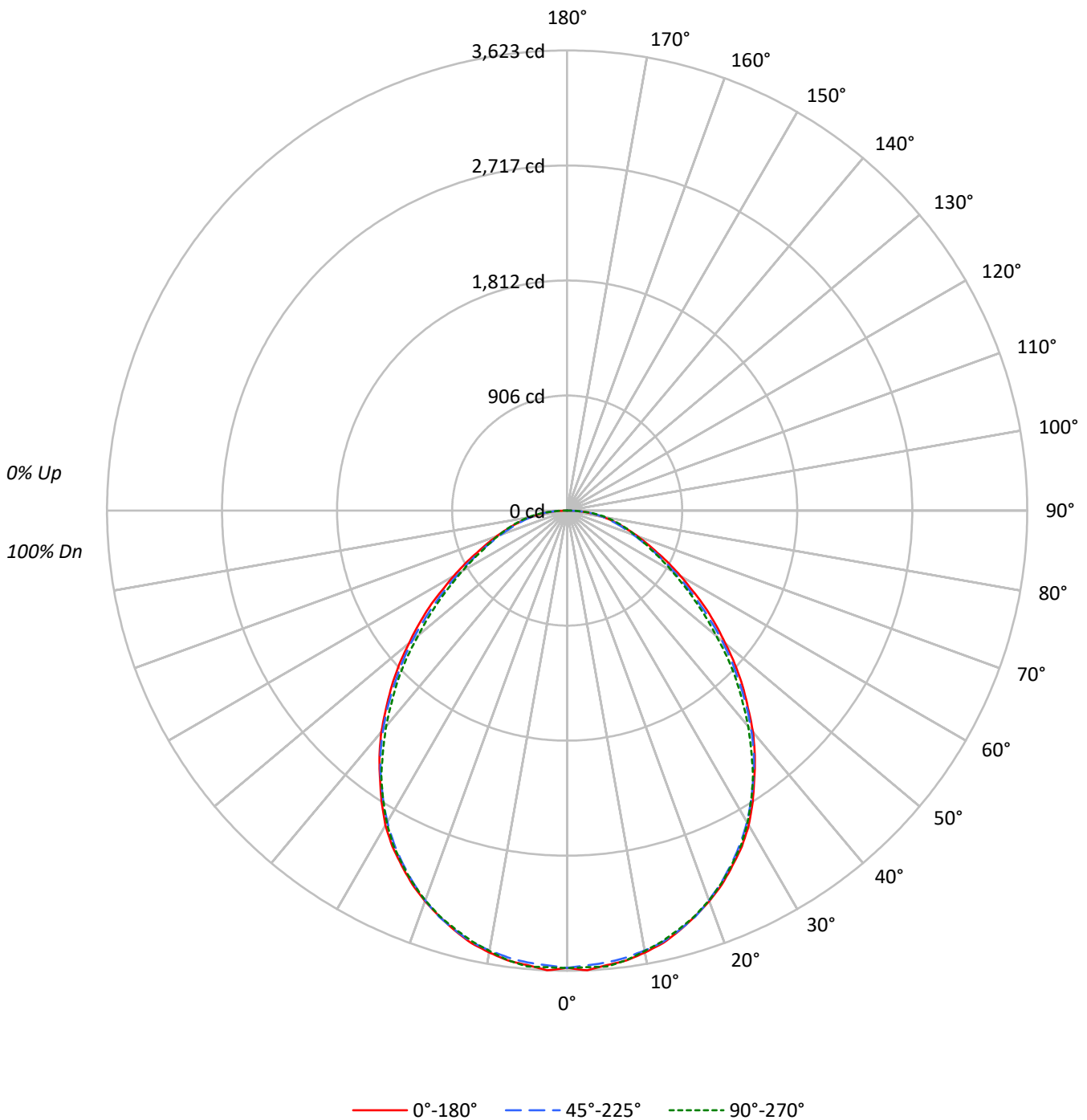
Input Watts (W): 62.403
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292950

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P292950

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L83050-W2A1-U-3500K

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°	4844	4844	4844
5°	4851	4824	4865
10°	4826	4805	4809
15°	4765	4761	4749
20°	4685	4676	4676
25°	4576	4551	4561
30°	4444	4399	4412
35°	4221	4201	4190
40°	3997	3961	3892
45°	3715	3650	3578
50°	3403	3328	3203
55°	3108	2968	2867
60°	2770	2636	2567
65°	2493	2362	2330
70°	2314	2172	2260
75°	2213	2115	2293
80°	2212	2212	2451
85°	2296	2323	2586



TEST NUMBER: P292950

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.0	4.1
10°-20°	962.3	11.6
20°-30°	1412.3	17.0
30°-40°	1596.7	19.3
40°-50°	1475.6	17.8
50°-60°	1136.9	13.7
60°-70°	752.8	9.1
70°-80°	448.2	5.4
80°-90°	164.2	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°	2714.6	32.7
0°-40°	4311.2	52.0
0°-60°	6923.8	83.5
0°-90°	8289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8289.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3600	3600	3600	3600	3600	
5°	3592	3592	3572	3573	3602	341
15°	3421	3414	3418	3416	3409	964
25°	3082	3074	3065	3062	3072	1419
35°	2570	2566	2558	2546	2551	1608
45°	1952	1939	1918	1884	1881	1504
55°	1325	1298	1265	1231	1222	1182
65°	783	771	742	735	732	785
75°	426	415	407	426	441	454
85°	149	140	150	166	168	158
90°	0	0	0	0	0	



TEST NUMBER: P292950

CATALOG NUMBER: 24GR-LD5-85-F1-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3600.5	3600.5	3600.5	3600.5	3600.5
2.5°	3622.8	3604.0	3583.4	3583.4	3598.8
5°	3592.0	3592.0	3571.5	3573.2	3602.3
7.5°	3573.2	3562.9	3549.3	3549.3	3571.5
10°	3532.2	3523.6	3516.8	3513.4	3520.2
12.5°	3487.7	3474.0	3479.2	3474.0	3472.3
15°	3421.0	3414.2	3417.6	3415.9	3409.1
17.5°	3349.2	3345.8	3352.6	3340.7	3345.8
20°	3272.3	3262.0	3265.5	3258.6	3265.5
22.5°	3185.1	3178.3	3169.7	3161.2	3174.8
25°	3082.5	3074.0	3065.4	3062.0	3072.3
27.5°	2979.9	2966.3	2954.3	2950.9	2966.3
30°	2860.3	2844.9	2831.2	2827.8	2839.7
32.5°	2718.4	2714.9	2697.8	2691.0	2696.1
35°	2569.6	2566.2	2557.7	2545.7	2550.8
37.5°	2427.7	2426.0	2414.0	2393.5	2379.8
40°	2275.6	2263.6	2255.0	2226.0	2215.7
42.5°	2108.0	2104.6	2089.2	2056.7	2044.8
45°	1952.4	1938.8	1918.2	1884.0	1880.6
47.5°	1791.7	1772.9	1754.1	1711.4	1709.7
50°	1625.9	1612.2	1590.0	1547.2	1530.1
52.5°	1472.0	1453.2	1422.4	1381.4	1372.9
55°	1325.0	1297.6	1265.1	1231.0	1222.4
57.5°	1167.7	1155.7	1116.4	1089.1	1078.8
60°	1029.2	1019.0	979.6	954.0	954.0
62.5°	904.4	889.0	854.8	837.7	837.7
65°	783.0	771.1	742.0	735.2	731.7
67.5°	678.7	663.3	642.8	641.1	649.7
70°	588.1	569.3	552.2	569.3	574.4
72.5°	502.6	490.7	475.3	497.5	507.8
75°	425.7	415.4	406.9	425.7	441.1
77.5°	355.6	345.4	345.4	365.9	379.5
80°	285.5	278.7	285.5	302.6	316.3
82.5°	218.8	213.7	222.3	239.4	247.9
85°	148.7	140.2	150.5	165.8	167.5
87.5°	70.1	68.4	75.2	85.5	83.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)