

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: P293141

Luminaire Tested: **24GR-LD5-64-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293141  
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-LD5-64-F1-UNV-L92765-W2A1-U-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6033.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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

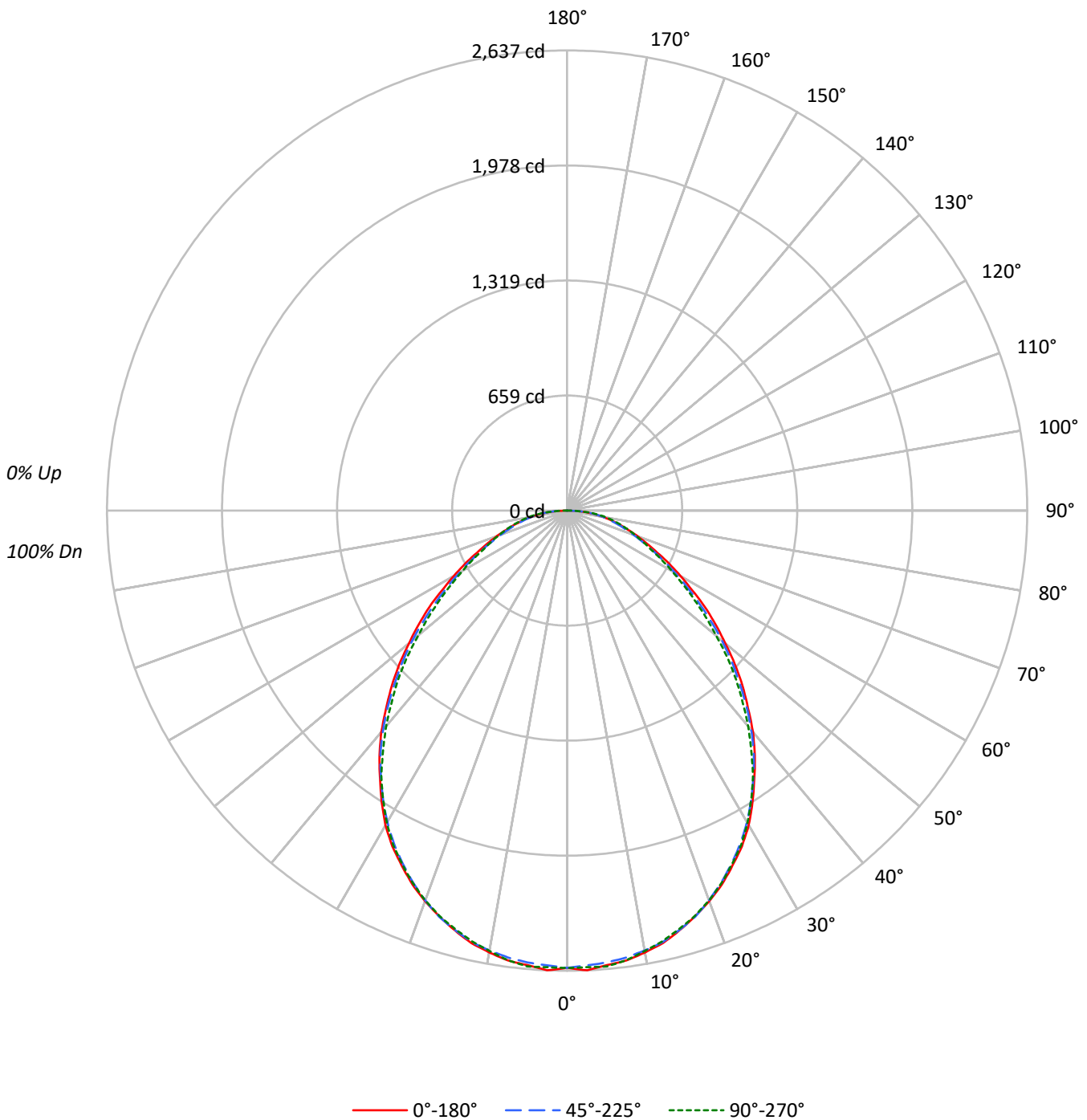
Input Watts (W): 47.337  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	3526	3526	3526
5°	3531	3511	3541
10°	3512	3497	3500
15°	3468	3465	3456
20°	3410	3403	3403
25°	3331	3312	3320
30°	3234	3201	3211
35°	3072	3058	3050
40°	2909	2883	2833
45°	2704	2657	2605
50°	2477	2422	2331
55°	2262	2160	2087
60°	2016	1919	1868
65°	1814	1719	1696
70°	1684	1581	1645
75°	1611	1540	1669
80°	1610	1610	1784
85°	1672	1690	1882



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.5	4.1
10°-20°	700.4	11.6
20°-30°	1027.9	17.0
30°-40°	1162.1	19.3
40°-50°	1074.0	17.8
50°-60°	827.5	13.7
60°-70°	547.9	9.1
70°-80°	326.2	5.4
80°-90°	119.5	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°	1975.7	32.7
0°-40°	3137.8	52.0
0°-60°	5039.4	83.5
0°-90°	6033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6033.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2621	2621	2621	2621	2621	
5°	2614	2614	2599	2601	2622	248
15°	2490	2485	2487	2486	2481	702
25°	2244	2237	2231	2229	2236	1033
35°	1870	1868	1862	1853	1857	1170
45°	1421	1411	1396	1371	1369	1095
55°	964	944	921	896	890	860
65°	570	561	540	535	533	571
75°	310	302	296	310	321	330
85°	108	102	110	121	122	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2620.6	2620.6	2620.6	2620.6	2620.6
2.5°	2636.8	2623.1	2608.1	2608.1	2619.3
5°	2614.4	2614.4	2599.4	2600.7	2621.8
7.5°	2600.7	2593.2	2583.3	2583.3	2599.4
10°	2570.8	2564.6	2559.6	2557.1	2562.1
12.5°	2538.5	2528.5	2532.2	2528.5	2527.3
15°	2489.9	2485.0	2487.4	2486.2	2481.2
17.5°	2437.7	2435.2	2440.2	2431.5	2435.2
20°	2381.7	2374.2	2376.7	2371.7	2376.7
22.5°	2318.2	2313.2	2307.0	2300.8	2310.8
25°	2243.6	2237.3	2231.1	2228.6	2236.1
27.5°	2168.9	2158.9	2150.2	2147.7	2158.9
30°	2081.8	2070.6	2060.6	2058.1	2066.9
32.5°	1978.5	1976.0	1963.6	1958.6	1962.3
35°	1870.3	1867.8	1861.5	1852.8	1856.6
37.5°	1767.0	1765.7	1757.0	1742.1	1732.1
40°	1656.2	1647.5	1641.3	1620.1	1612.7
42.5°	1534.3	1531.8	1520.6	1496.9	1488.2
45°	1421.0	1411.1	1396.2	1371.3	1368.8
47.5°	1304.1	1290.4	1276.7	1245.6	1244.3
50°	1183.4	1173.4	1157.2	1126.1	1113.7
52.5°	1071.4	1057.7	1035.3	1005.4	999.2
55°	964.4	944.5	920.8	895.9	889.7
57.5°	849.9	841.2	812.6	792.6	785.2
60°	749.1	741.6	713.0	694.3	694.3
62.5°	658.3	647.1	622.2	609.7	609.7
65°	569.9	561.2	540.0	535.1	532.6
67.5°	494.0	482.8	467.9	466.6	472.9
70°	428.1	414.4	401.9	414.4	418.1
72.5°	365.8	357.1	345.9	362.1	369.6
75°	309.8	302.4	296.2	309.8	321.0
77.5°	258.8	251.4	251.4	266.3	276.2
80°	207.8	202.8	207.8	220.2	230.2
82.5°	159.3	155.5	161.8	174.2	180.4
85°	108.3	102.0	109.5	120.7	121.9
87.5°	51.0	49.8	54.8	62.2	61.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)