

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: P294075

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-A19/156-UNV-L93050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5717.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

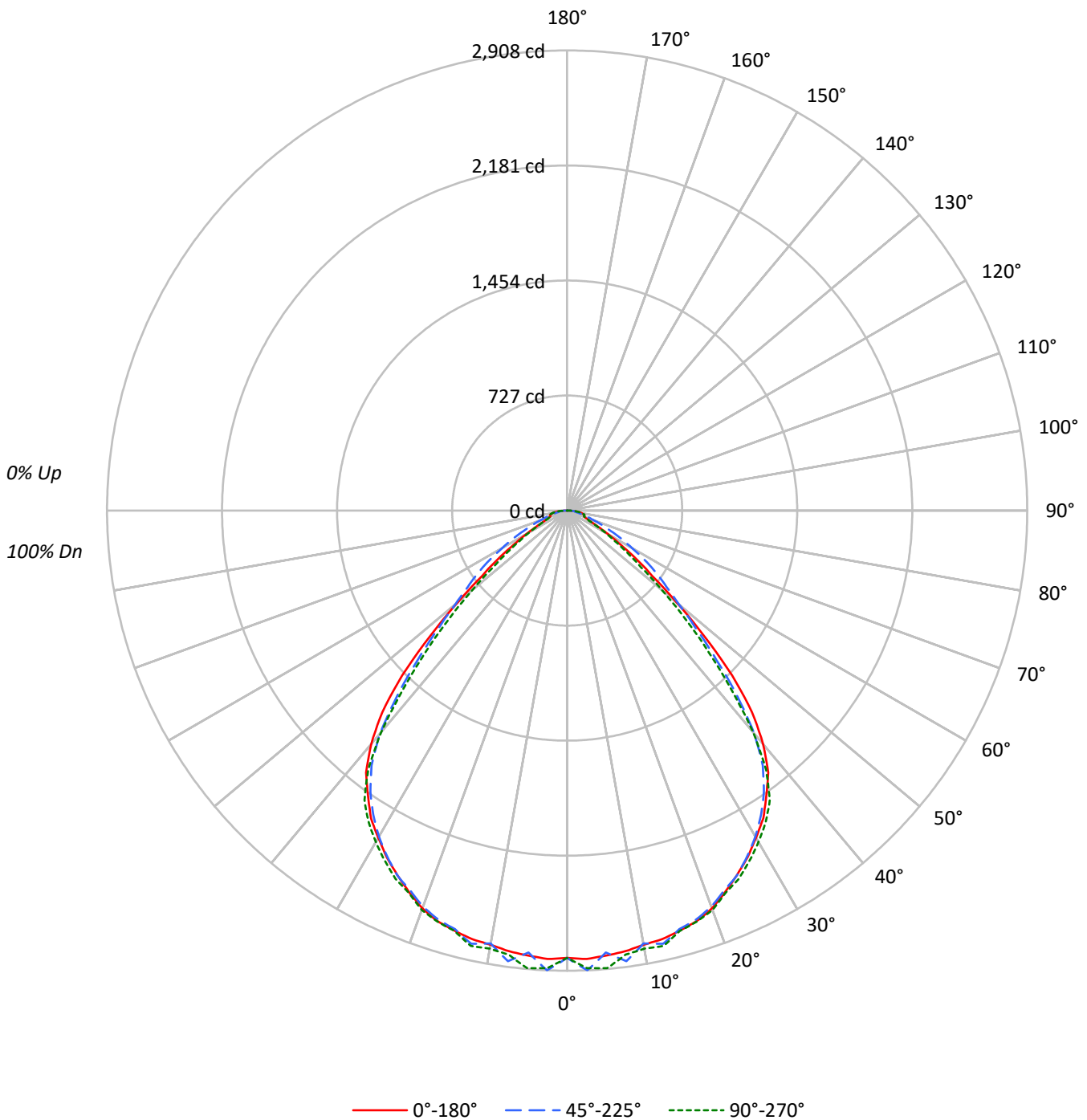
Input Watts (W): 47.136492
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3804	3804	3804
5°	3812	3787	3921
10°	3806	3794	3841
15°	3828	3815	3830
20°	3831	3815	3846
25°	3771	3774	3811
30°	3709	3697	3757
35°	3604	3561	3668
40°	3385	3233	3215
45°	2806	2538	2407
50°	1887	1926	1645
55°	1245	1615	1079
60°	798	1275	739
65°	514	973	500
70°	455	697	455
75°	587	554	592
80°	718	477	754
85°	837	709	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.7	4.7
10°-20°	777.2	13.6
20°-30°	1170.0	20.5
30°-40°	1356.1	23.7
40°-50°	1059.4	18.5
50°-60°	565.7	9.9
60°-70°	290.9	5.1
70°-80°	164.5	2.9
80°-90°	62.5	1.1
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°	2217.9	38.8
0°-40°	3574.0	62.5
0°-60°	5199.1	90.9
0°-90°	5717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5717.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2827	2827	2827	2827	2827	
5°	2822	2901	2804	2881	2903	268
15°	2748	2765	2739	2756	2750	776
25°	2540	2532	2542	2539	2567	1171
35°	2194	2184	2168	2211	2233	1368
45°	1474	1475	1334	1322	1265	1111
55°	531	671	689	621	460	490
65°	162	337	306	336	157	178
75°	113	212	106	198	114	114
85°	54	71	46	71	57	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2826.9	2826.9	2826.9	2826.9	2826.9
2.5°	2836.1	2887.5	2907.7	2882.9	2893.9
5°	2822.3	2901.3	2803.9	2881.1	2903.1
7.5°	2809.4	2801.2	2871.9	2798.4	2829.6
10°	2785.6	2791.1	2777.3	2829.6	2811.3
12.5°	2774.6	2806.7	2803.9	2777.3	2817.7
15°	2747.9	2765.4	2738.8	2756.2	2749.8
17.5°	2721.3	2713.0	2710.3	2717.6	2724.1
20°	2675.4	2647.9	2664.4	2666.2	2686.4
22.5°	2609.3	2592.8	2596.4	2613.0	2614.8
25°	2540.4	2532.2	2542.3	2538.6	2567.1
27.5°	2468.8	2457.8	2464.2	2478.0	2495.5
30°	2387.1	2384.4	2379.8	2391.7	2418.3
32.5°	2306.3	2284.3	2280.6	2305.4	2335.7
35°	2194.3	2184.2	2167.7	2210.8	2232.9
37.5°	2087.8	2056.6	2030.0	2055.7	2064.9
40°	1927.1	1903.3	1840.8	1843.6	1830.7
42.5°	1729.7	1712.3	1592.9	1571.8	1536.0
45°	1474.5	1475.4	1334.0	1322.1	1265.2
47.5°	1177.9	1230.3	1107.3	1093.5	1009.0
50°	901.6	996.2	920.0	897.9	785.9
52.5°	676.7	815.3	791.4	743.7	589.4
55°	530.7	671.1	688.6	620.6	460.0
57.5°	399.4	552.7	581.2	525.2	355.3
60°	296.6	465.5	473.8	451.7	274.5
62.5°	220.3	395.7	384.7	387.4	203.8
65°	161.6	337.0	305.7	336.0	157.0
67.5°	132.2	292.0	237.8	291.0	127.6
70°	115.7	258.9	177.2	256.2	115.7
72.5°	112.0	237.8	140.5	227.7	112.9
75°	112.9	212.1	106.5	198.3	113.8
77.5°	103.7	174.4	80.8	168.9	108.3
80°	92.7	132.2	61.5	134.0	97.3
82.5°	79.0	96.4	49.6	99.2	81.7
85°	54.2	70.7	45.9	70.7	56.9
87.5°	25.7	42.2	28.5	40.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)