

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: P294007

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294007
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-LD5-56-A19/156-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5033.0 lumens
Efficiency: N/A
Efficacy: 129.2 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

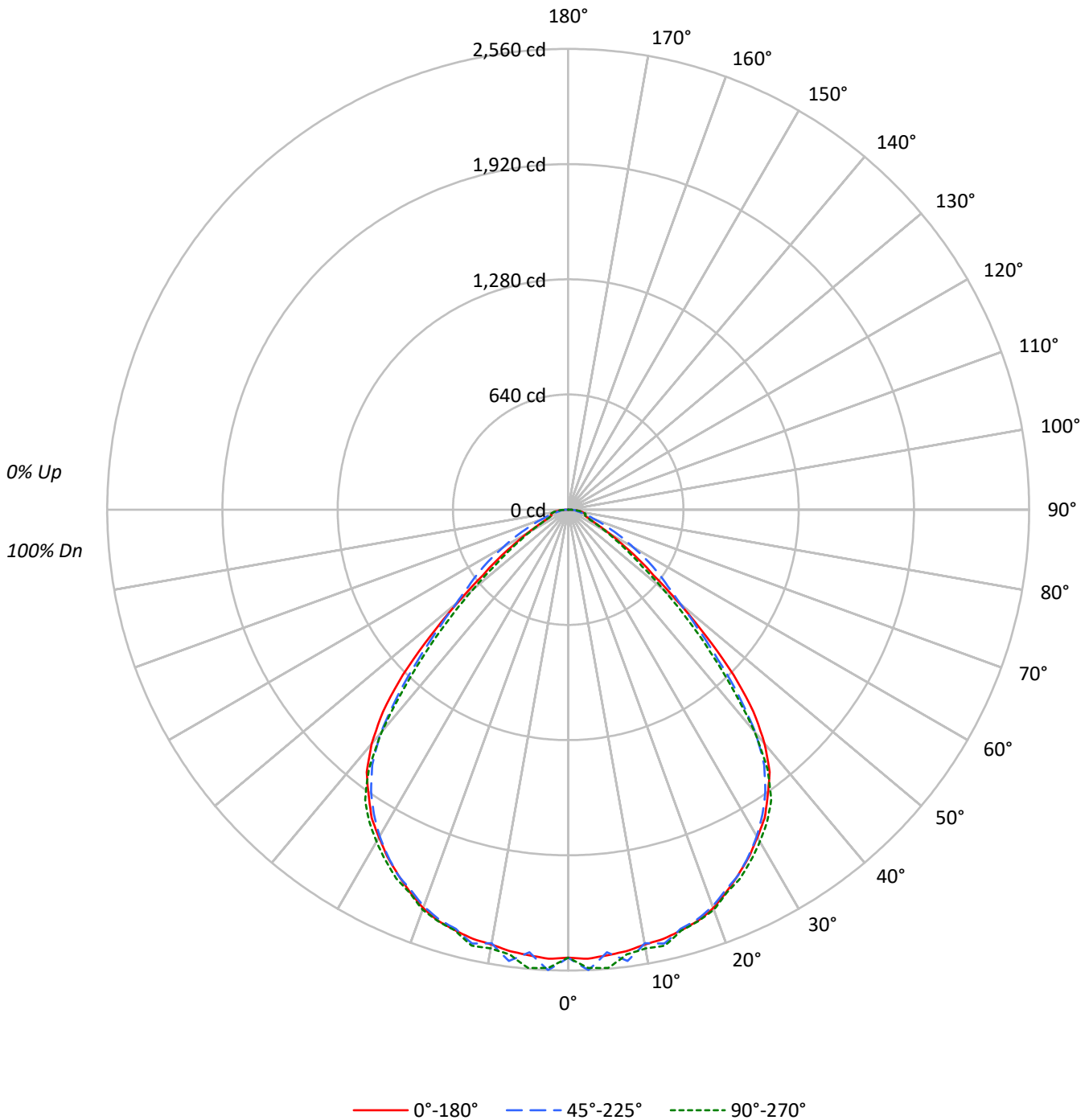
Input Watts (W): 38.967
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3349	3349	3349
5°	3356	3334	3452
10°	3350	3340	3381
15°	3370	3359	3372
20°	3372	3359	3386
25°	3320	3323	3355
30°	3265	3255	3308
35°	3173	3134	3229
40°	2980	2846	2831
45°	2470	2235	2119
50°	1661	1695	1448
55°	1096	1422	950
60°	703	1122	650
65°	453	857	440
70°	400	614	400
75°	517	488	521
80°	632	420	664
85°	736	624	773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.3	4.7
10°-20°	684.2	13.6
20°-30°	1030.0	20.5
30°-40°	1193.9	23.7
40°-50°	932.6	18.5
50°-60°	498.0	9.9
60°-70°	256.1	5.1
70°-80°	144.9	2.9
80°-90°	55.0	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°	1952.5	38.8
0°-40°	3146.4	62.5
0°-60°	4577.0	90.9
0°-90°	5033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2489	2489	2489	2489	2489	
5°	2485	2554	2468	2536	2556	236
15°	2419	2434	2411	2426	2421	683
25°	2236	2229	2238	2235	2260	1031
35°	1932	1923	1908	1946	1966	1204
45°	1298	1299	1174	1164	1114	978
55°	467	591	606	546	405	431
65°	142	297	269	296	138	156
75°	99	187	94	175	100	101
85°	48	62	40	62	50	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2488.7	2488.7	2488.7	2488.7	2488.7
2.5°	2496.8	2542.0	2559.8	2538.0	2547.7
5°	2484.6	2554.1	2468.5	2536.4	2555.8
7.5°	2473.3	2466.0	2528.3	2463.6	2491.1
10°	2452.3	2457.2	2445.0	2491.1	2474.9
12.5°	2442.6	2470.9	2468.5	2445.0	2480.6
15°	2419.2	2434.5	2411.1	2426.4	2420.8
17.5°	2395.7	2388.4	2386.0	2392.5	2398.1
20°	2355.3	2331.1	2345.6	2347.2	2365.0
22.5°	2297.1	2282.6	2285.8	2300.3	2302.0
25°	2236.5	2229.2	2238.1	2234.9	2259.9
27.5°	2173.4	2163.7	2169.4	2181.5	2196.9
30°	2101.5	2099.1	2095.0	2105.6	2129.0
32.5°	2030.4	2011.0	2007.8	2029.6	2056.2
35°	1931.8	1922.9	1908.3	1946.3	1965.7
37.5°	1838.0	1810.5	1787.1	1809.7	1817.8
40°	1696.6	1675.6	1620.6	1623.0	1611.7
42.5°	1522.8	1507.4	1402.4	1383.8	1352.2
45°	1298.1	1298.9	1174.4	1163.9	1113.8
47.5°	1037.0	1083.1	974.8	962.7	888.3
50°	793.7	877.0	809.9	790.5	691.9
52.5°	595.7	717.7	696.7	654.7	518.9
55°	467.2	590.8	606.2	546.4	404.9
57.5°	351.6	486.6	511.6	462.3	312.8
60°	261.1	409.8	417.1	397.7	241.7
62.5°	194.0	348.4	338.7	341.1	179.4
65°	142.3	296.6	269.2	295.8	138.2
67.5°	116.4	257.0	209.3	256.2	112.4
70°	101.8	227.9	156.0	225.5	101.8
72.5°	98.6	209.3	123.7	200.5	99.4
75°	99.4	186.7	93.8	174.6	100.2
77.5°	91.3	153.6	71.1	148.7	95.4
80°	81.6	116.4	54.2	118.0	85.7
82.5°	69.5	84.9	43.6	87.3	71.9
85°	47.7	62.2	40.4	62.2	50.1
87.5°	22.6	37.2	25.1	35.6	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)