

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: P294070

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294070
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-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: 5035.0 lumens
Efficiency: N/A
Efficacy: 125.9 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

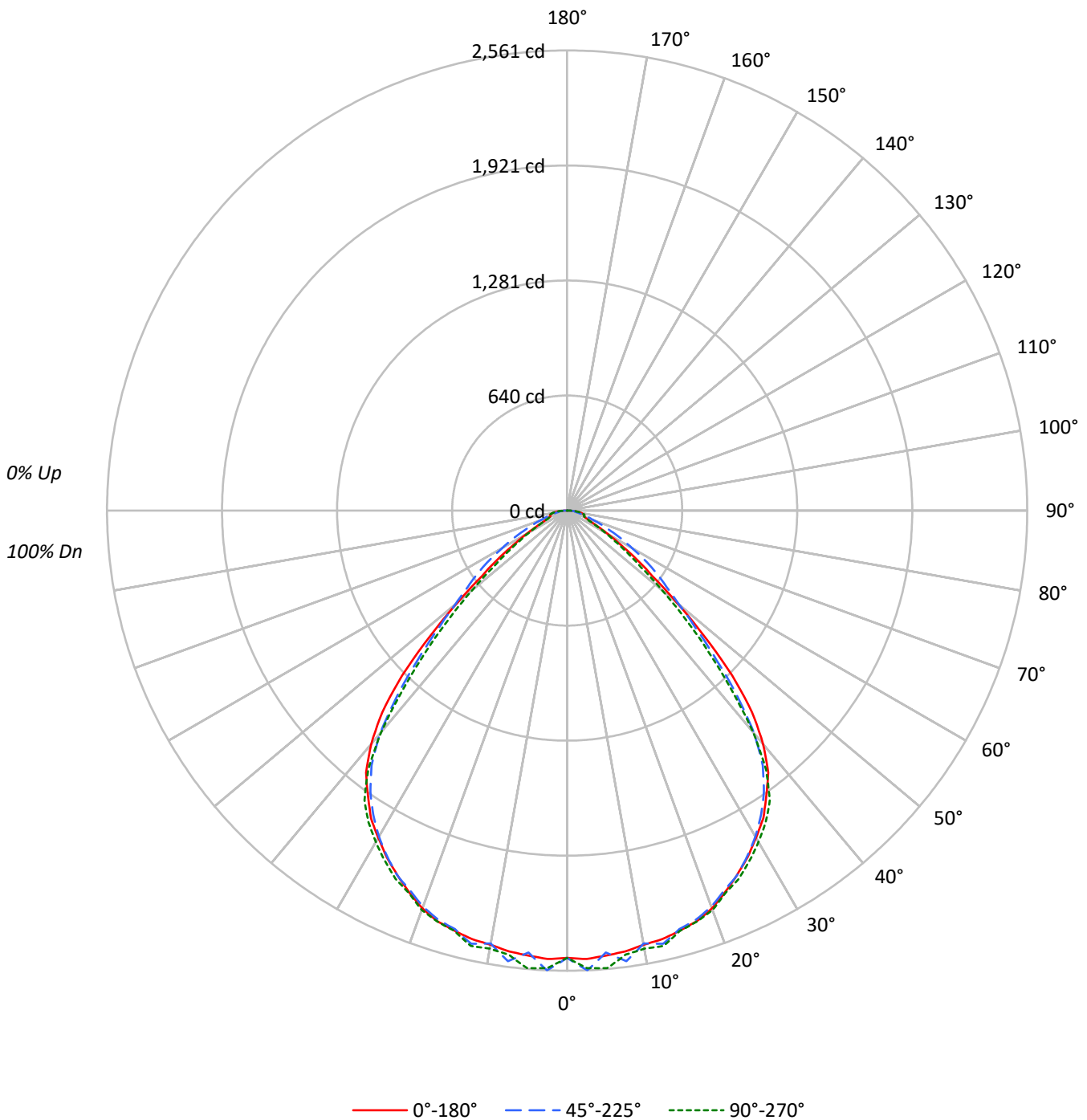
Input Watts (W): 39.980142
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41		51	45	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	37		47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3350	3350	3350
5°	3357	3335	3453
10°	3352	3342	3383
15°	3371	3360	3373
20°	3374	3360	3388
25°	3322	3324	3356
30°	3266	3256	3309
35°	3174	3136	3230
40°	2981	2847	2832
45°	2471	2236	2120
50°	1662	1696	1449
55°	1096	1422	950
60°	703	1123	651
65°	453	857	440
70°	401	614	401
75°	517	488	521
80°	633	420	664
85°	736	624	773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.4	4.7
10°-20°	684.5	13.6
20°-30°	1030.5	20.5
30°-40°	1194.4	23.7
40°-50°	933.0	18.5
50°-60°	498.2	9.9
60°-70°	256.2	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°	1953.3	38.8
0°-40°	3147.7	62.5
0°-60°	4578.8	90.9
0°-90°	5035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5035.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2490	2490	2490	2490	2490	
5°	2486	2555	2469	2537	2557	236
15°	2420	2436	2412	2427	2422	684
25°	2237	2230	2239	2236	2261	1031
35°	1932	1924	1909	1947	1966	1205
45°	1299	1299	1175	1164	1114	979
55°	467	591	606	547	405	431
65°	142	297	269	296	138	156
75°	100	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°	2489.7	2489.7	2489.7	2489.7	2489.7
2.5°	2497.7	2543.0	2560.8	2539.0	2548.7
5°	2485.6	2555.2	2469.4	2537.4	2556.8
7.5°	2474.3	2467.0	2529.3	2464.6	2492.1
10°	2453.3	2458.1	2446.0	2492.1	2475.9
12.5°	2443.6	2471.9	2469.4	2446.0	2481.6
15°	2420.1	2435.5	2412.0	2427.4	2421.7
17.5°	2396.7	2389.4	2387.0	2393.4	2399.1
20°	2356.2	2332.0	2346.5	2348.2	2365.9
22.5°	2298.0	2283.5	2286.7	2301.3	2302.9
25°	2237.4	2230.1	2239.0	2235.8	2260.8
27.5°	2174.3	2164.6	2170.3	2182.4	2197.8
30°	2102.3	2099.9	2095.9	2106.4	2129.8
32.5°	2031.2	2011.8	2008.5	2030.4	2057.1
35°	1932.5	1923.6	1909.1	1947.1	1966.5
37.5°	1838.7	1811.3	1787.8	1810.4	1818.5
40°	1697.2	1676.2	1621.2	1623.7	1612.3
42.5°	1523.4	1508.0	1402.9	1384.3	1352.8
45°	1298.6	1299.4	1174.9	1164.4	1114.2
47.5°	1037.4	1083.5	975.2	963.0	888.6
50°	794.0	877.3	810.2	790.8	692.2
52.5°	595.9	718.0	697.0	655.0	519.1
55°	467.4	591.1	606.4	546.6	405.1
57.5°	351.7	486.8	511.8	462.5	312.9
60°	261.2	410.0	417.2	397.8	241.8
62.5°	194.1	348.5	338.8	341.2	179.5
65°	142.3	296.8	269.3	295.9	138.3
67.5°	116.4	257.1	209.4	256.3	112.4
70°	101.9	228.0	156.1	225.6	101.9
72.5°	98.6	209.4	123.7	200.5	99.5
75°	99.5	186.8	93.8	174.7	100.3
77.5°	91.4	153.6	71.2	148.8	95.4
80°	81.7	116.4	54.2	118.1	85.7
82.5°	69.5	84.9	43.7	87.3	72.0
85°	47.7	62.3	40.4	62.3	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)