

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: P293935

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293935
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-LD5-42-A19/156-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4325.0 lumens
Efficiency: N/A
Efficacy: 147.2 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

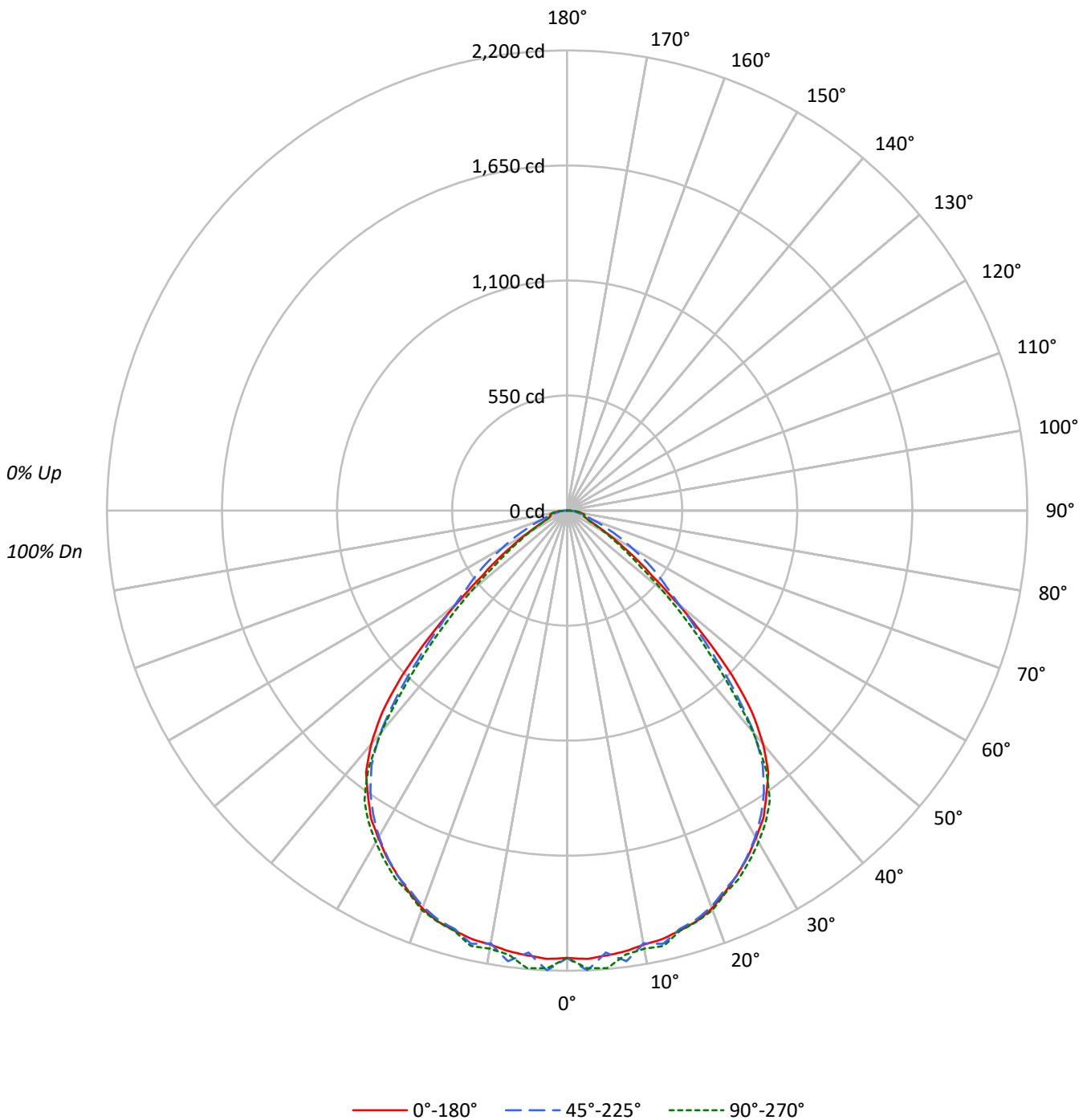
Input Watts (W): 29.388
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2877	2877	2877
5°	2884	2865	2966
10°	2879	2871	2906
15°	2896	2886	2898
20°	2898	2886	2910
25°	2853	2855	2883
30°	2806	2797	2842
35°	2727	2694	2775
40°	2561	2446	2433
45°	2123	1920	1821
50°	1428	1457	1245
55°	942	1222	816
60°	604	964	559
65°	389	736	378
70°	344	528	344
75°	444	419	448
80°	544	360	570
85°	633	536	665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.8	4.7
10°-20°	587.9	13.6
20°-30°	885.2	20.5
30°-40°	1025.9	23.7
40°-50°	801.4	18.5
50°-60°	427.9	9.9
60°-70°	220.1	5.1
70°-80°	124.5	2.9
80°-90°	47.3	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°	1677.9	38.8
0°-40°	2703.8	62.5
0°-60°	3933.2	90.9
0°-90°	4325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2139	2139	2139	2139	2139	
5°	2135	2195	2121	2180	2196	203
15°	2079	2092	2072	2085	2080	587
25°	1922	1916	1923	1920	1942	886
35°	1660	1652	1640	1672	1689	1035
45°	1116	1116	1009	1000	957	841
55°	402	508	521	470	348	370
65°	122	255	231	254	119	134
75°	85	160	81	150	86	87
85°	41	54	35	54	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2138.6	2138.6	2138.6	2138.6	2138.6
2.5°	2145.5	2184.4	2199.7	2181.0	2189.3
5°	2135.1	2194.8	2121.2	2179.6	2196.2
7.5°	2125.4	2119.1	2172.6	2117.1	2140.7
10°	2107.3	2111.5	2101.1	2140.7	2126.8
12.5°	2099.0	2123.3	2121.2	2101.1	2131.6
15°	2078.9	2092.1	2071.9	2085.1	2080.2
17.5°	2058.7	2052.5	2050.4	2055.9	2060.8
20°	2024.0	2003.1	2015.6	2017.0	2032.3
22.5°	1974.0	1961.5	1964.3	1976.8	1978.1
25°	1921.9	1915.6	1923.3	1920.5	1942.0
27.5°	1867.7	1859.4	1864.2	1874.7	1887.8
30°	1805.9	1803.8	1800.3	1809.4	1829.5
32.5°	1744.8	1728.1	1725.3	1744.1	1767.0
35°	1660.0	1652.4	1639.9	1672.5	1689.2
37.5°	1579.5	1555.8	1535.7	1555.1	1562.1
40°	1457.9	1439.8	1392.6	1394.7	1385.0
42.5°	1308.6	1295.4	1205.1	1189.1	1162.0
45°	1115.5	1116.2	1009.2	1000.2	957.1
47.5°	891.1	930.7	837.7	827.2	763.3
50°	682.1	753.6	696.0	679.3	594.6
52.5°	511.9	616.8	598.7	562.6	445.9
55°	401.5	507.7	520.9	469.5	348.0
57.5°	302.1	418.1	439.7	397.3	268.8
60°	224.3	352.1	358.4	341.7	207.7
62.5°	166.7	299.4	291.0	293.1	154.2
65°	122.2	254.9	231.3	254.2	118.8
67.5°	100.0	220.9	179.9	220.2	96.5
70°	87.5	195.9	134.1	193.8	87.5
72.5°	84.7	179.9	106.3	172.3	85.4
75°	85.4	160.4	80.6	150.0	86.1
77.5°	78.5	132.0	61.1	127.8	82.0
80°	70.2	100.0	46.5	101.4	73.6
82.5°	59.7	72.9	37.5	75.0	61.8
85°	41.0	53.5	34.7	53.5	43.1
87.5°	19.4	32.0	21.5	30.6	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)