

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: P294133

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294133
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-L92765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4298.0 lumens
Efficiency: N/A
Efficacy: 110.6 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

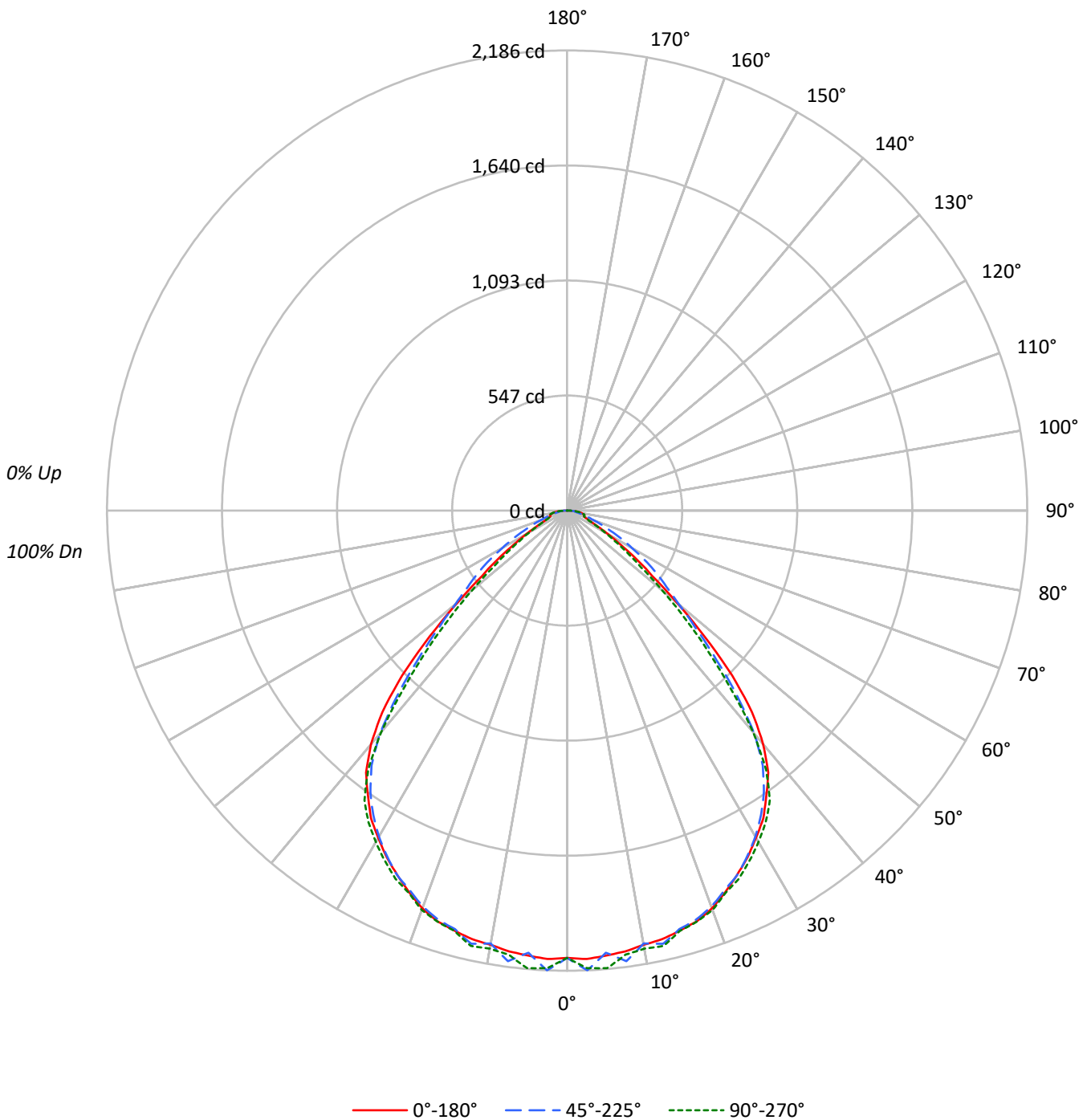
Input Watts (W): 38.874
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2859	2859	2859
5°	2866	2847	2948
10°	2861	2853	2888
15°	2878	2868	2880
20°	2880	2868	2892
25°	2835	2837	2865
30°	2788	2780	2825
35°	2710	2677	2757
40°	2545	2431	2417
45°	2109	1908	1810
50°	1419	1448	1237
55°	936	1214	811
60°	600	959	555
65°	387	732	376
70°	342	524	342
75°	441	416	445
80°	540	358	567
85°	628	533	661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	4.7
10°-20°	584.3	13.6
20°-30°	879.6	20.5
30°-40°	1019.5	23.7
40°-50°	796.4	18.5
50°-60°	425.3	9.9
60°-70°	218.7	5.1
70°-80°	123.7	2.9
80°-90°	47.0	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°	1667.4	38.8
0°-40°	2686.9	62.5
0°-60°	3908.6	90.9
0°-90°	4298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4298.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2125	2125	2125	2125	2125	
5°	2122	2181	2108	2166	2182	202
15°	2066	2079	2059	2072	2067	584
25°	1910	1904	1911	1908	1930	880
35°	1650	1642	1630	1662	1679	1028
45°	1108	1109	1003	994	951	835
55°	399	505	518	467	346	368
65°	122	253	230	253	118	134
75°	85	159	80	149	86	86
85°	41	53	34	53	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2125.2	2125.2	2125.2	2125.2	2125.2
2.5°	2132.1	2170.8	2186.0	2167.3	2175.6
5°	2121.8	2181.1	2108.0	2166.0	2182.5
7.5°	2112.1	2105.9	2159.1	2103.8	2127.3
10°	2094.2	2098.3	2088.0	2127.3	2113.5
12.5°	2085.9	2110.1	2108.0	2088.0	2118.3
15°	2065.9	2079.0	2059.0	2072.1	2067.3
17.5°	2045.9	2039.6	2037.6	2043.1	2047.9
20°	2011.3	1990.6	2003.1	2004.4	2019.6
22.5°	1961.7	1949.2	1952.0	1964.4	1965.8
25°	1909.9	1903.7	1911.3	1908.5	1929.9
27.5°	1856.0	1847.8	1852.6	1862.9	1876.1
30°	1794.6	1792.5	1789.1	1798.1	1818.1
32.5°	1733.9	1717.3	1714.5	1733.2	1756.0
35°	1649.7	1642.1	1629.6	1662.1	1678.7
37.5°	1569.6	1546.1	1526.1	1545.4	1552.3
40°	1448.8	1430.9	1383.9	1386.0	1376.3
42.5°	1300.4	1287.3	1197.6	1181.7	1154.8
45°	1108.5	1109.2	1002.9	993.9	951.1
47.5°	885.6	924.9	832.4	822.1	758.6
50°	677.8	748.9	691.6	675.1	590.8
52.5°	508.7	612.9	595.0	559.1	443.1
55°	399.0	504.6	517.7	466.6	345.8
57.5°	300.3	415.5	436.9	394.8	267.1
60°	222.9	349.9	356.2	339.6	206.4
62.5°	165.7	297.5	289.2	291.3	153.2
65°	121.5	253.3	229.8	252.6	118.0
67.5°	99.4	219.5	178.8	218.8	95.9
70°	87.0	194.6	133.2	192.6	87.0
72.5°	84.2	178.8	105.6	171.2	84.9
75°	84.9	159.4	80.1	149.1	85.6
77.5°	78.0	131.1	60.7	127.0	81.4
80°	69.7	99.4	46.2	100.8	73.2
82.5°	59.4	72.5	37.3	74.5	61.4
85°	40.7	53.1	34.5	53.1	42.8
87.5°	19.3	31.8	21.4	30.4	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)