

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: P293933

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293933
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4080.0 lumens
Efficiency: N/A
Efficacy: 145.8 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

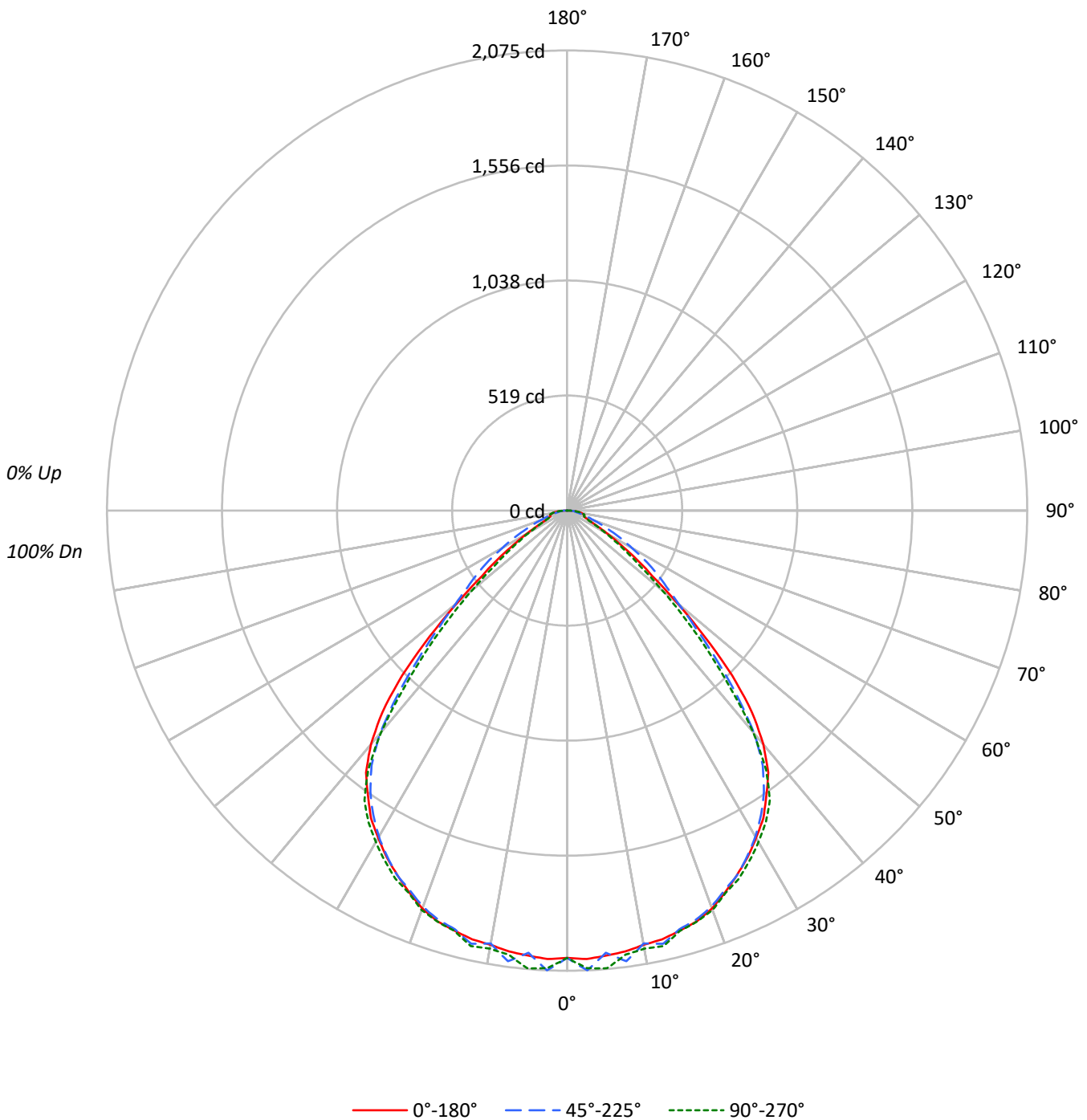
Input Watts (W): 27.993
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2714	2714	2714
5°	2720	2703	2798
10°	2716	2708	2741
15°	2732	2723	2734
20°	2734	2723	2745
25°	2692	2693	2720
30°	2647	2639	2681
35°	2572	2541	2617
40°	2416	2307	2295
45°	2002	1811	1718
50°	1347	1374	1174
55°	888	1153	770
60°	569	910	527
65°	367	695	357
70°	325	498	325
75°	419	395	422
80°	513	340	539
85°	597	506	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.2	4.7
10°-20°	554.6	13.6
20°-30°	835.0	20.5
30°-40°	967.8	23.7
40°-50°	756.0	18.5
50°-60°	403.7	9.9
60°-70°	207.6	5.1
70°-80°	117.4	2.9
80°-90°	44.6	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°	1582.8	38.8
0°-40°	2550.6	62.5
0°-60°	3710.4	90.9
0°-90°	4080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2017	2017	2017	2017	2017	
5°	2014	2070	2001	2056	2072	192
15°	1961	1974	1954	1967	1962	554
25°	1813	1807	1814	1812	1832	835
35°	1566	1559	1547	1578	1594	976
45°	1052	1053	952	944	903	793
55°	379	479	491	443	328	349
65°	115	240	218	240	112	127
75°	81	151	76	142	81	82
85°	39	50	33	50	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2017.4	2017.4	2017.4	2017.4	2017.4
2.5°	2024.0	2060.7	2075.1	2057.4	2065.3
5°	2014.2	2070.5	2001.1	2056.1	2071.8
7.5°	2005.0	1999.1	2049.5	1997.1	2019.4
10°	1988.0	1991.9	1982.1	2019.4	2006.3
12.5°	1980.1	2003.0	2001.1	1982.1	2010.9
15°	1961.1	1973.5	1954.5	1967.0	1962.4
17.5°	1942.1	1936.2	1934.2	1939.5	1944.1
20°	1909.3	1889.7	1901.5	1902.8	1917.2
22.5°	1862.2	1850.4	1853.0	1864.8	1866.1
25°	1813.0	1807.1	1814.3	1811.7	1832.0
27.5°	1761.9	1754.0	1758.6	1768.5	1780.9
30°	1703.6	1701.6	1698.3	1706.9	1725.9
32.5°	1645.9	1630.2	1627.6	1645.3	1666.9
35°	1566.0	1558.8	1547.0	1577.8	1593.5
37.5°	1490.0	1467.7	1448.7	1467.1	1473.6
40°	1375.3	1358.3	1313.7	1315.7	1306.5
42.5°	1234.4	1222.0	1136.8	1121.7	1096.2
45°	1052.3	1052.9	952.0	943.5	902.9
47.5°	840.7	878.0	790.2	780.4	720.1
50°	643.4	710.9	656.5	640.8	560.9
52.5°	482.9	581.8	564.8	530.7	420.7
55°	378.7	479.0	491.4	442.9	328.3
57.5°	285.0	394.4	414.8	374.8	253.6
60°	211.6	332.2	338.1	322.4	195.9
62.5°	157.3	282.4	274.5	276.5	145.5
65°	115.3	240.5	218.2	239.8	112.0
67.5°	94.4	208.4	169.7	207.7	91.1
70°	82.6	184.8	126.5	182.8	82.6
72.5°	79.9	169.7	100.2	162.5	80.6
75°	80.6	151.4	76.0	141.5	81.2
77.5°	74.0	124.5	57.7	120.6	77.3
80°	66.2	94.4	43.9	95.7	69.5
82.5°	56.3	68.8	35.4	70.8	58.3
85°	38.7	50.5	32.8	50.5	40.6
87.5°	18.3	30.1	20.3	28.8	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)