

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: P293993

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293993
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-L82765-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: 4145.0 lumens
Efficiency: N/A
Efficacy: 145.2 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

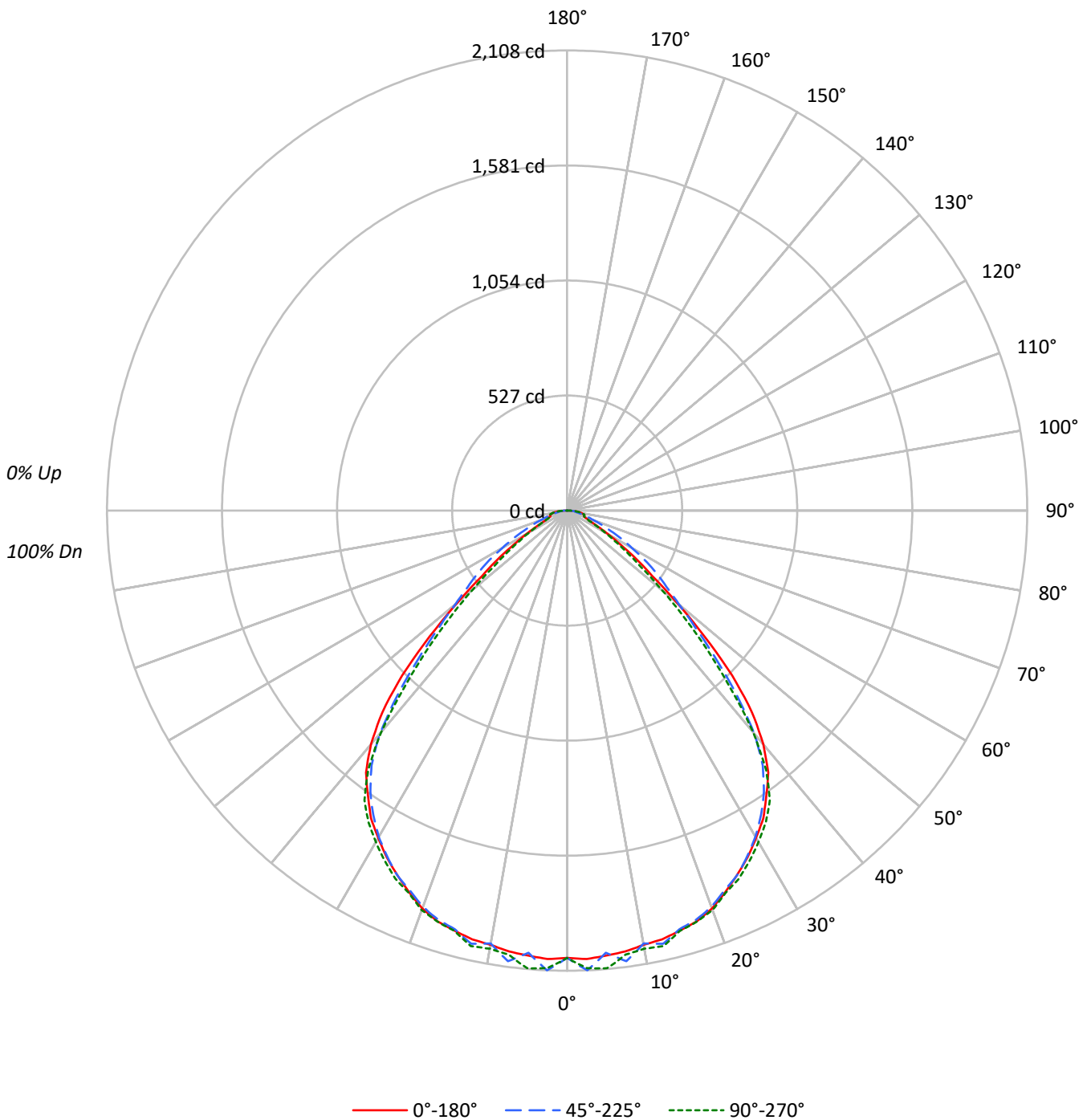
Input Watts (W): 28.551
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2758	2758	2758
5°	2764	2746	2843
10°	2759	2751	2785
15°	2775	2766	2777
20°	2777	2766	2789
25°	2734	2736	2763
30°	2689	2681	2724
35°	2613	2581	2659
40°	2454	2344	2331
45°	2034	1840	1745
50°	1368	1396	1193
55°	903	1171	782
60°	579	924	536
65°	373	706	362
70°	330	506	330
75°	426	401	429
80°	521	346	547
85°	607	514	638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.2	4.7
10°-20°	563.5	13.6
20°-30°	848.3	20.5
30°-40°	983.2	23.7
40°-50°	768.1	18.5
50°-60°	410.1	9.9
60°-70°	210.9	5.1
70°-80°	119.3	2.9
80°-90°	45.3	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°	1608.0	38.8
0°-40°	2591.3	62.5
0°-60°	3769.5	90.9
0°-90°	4145.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4145.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2050	2050	2050	2050	2050	
5°	2046	2104	2033	2089	2105	195
15°	1992	2005	1986	1998	1994	563
25°	1842	1836	1843	1841	1861	849
35°	1591	1584	1572	1603	1619	992
45°	1069	1070	967	959	917	806
55°	385	487	499	450	334	355
65°	117	244	222	244	114	129
75°	82	154	77	144	82	83
85°	39	51	33	51	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2049.6	2049.6	2049.6	2049.6	2049.6
2.5°	2056.2	2093.5	2108.2	2090.2	2098.2
5°	2046.3	2103.5	2032.9	2088.9	2104.8
7.5°	2036.9	2030.9	2082.2	2028.9	2051.6
10°	2019.6	2023.6	2013.6	2051.6	2038.3
12.5°	2011.6	2034.9	2032.9	2013.6	2042.9
15°	1992.3	2005.0	1985.7	1998.3	1993.7
17.5°	1973.0	1967.0	1965.0	1970.4	1975.0
20°	1939.7	1919.8	1931.8	1933.1	1947.7
22.5°	1891.8	1879.8	1882.5	1894.5	1895.8
25°	1841.9	1835.9	1843.2	1840.6	1861.2
27.5°	1790.0	1782.0	1786.6	1796.6	1809.3
30°	1730.7	1728.7	1725.4	1734.1	1753.4
32.5°	1672.2	1656.2	1653.5	1671.5	1693.5
35°	1590.9	1583.6	1571.6	1602.9	1618.9
37.5°	1513.7	1491.1	1471.8	1490.4	1497.1
40°	1397.2	1379.9	1334.7	1336.7	1327.3
42.5°	1254.1	1241.5	1154.9	1139.6	1113.7
45°	1069.1	1069.7	967.2	958.6	917.3
47.5°	854.0	892.0	802.8	792.8	731.6
50°	653.7	722.2	667.0	651.0	569.8
52.5°	490.6	591.1	573.8	539.2	427.4
55°	384.8	486.6	499.2	450.0	333.5
57.5°	289.6	400.7	421.4	380.8	257.6
60°	215.0	337.5	343.5	327.5	199.0
62.5°	159.8	286.9	278.9	280.9	147.8
65°	117.2	244.3	221.7	243.6	113.8
67.5°	95.9	211.7	172.4	211.0	92.5
70°	83.9	187.7	128.5	185.7	83.9
72.5°	81.2	172.4	101.8	165.1	81.9
75°	81.9	153.8	77.2	143.8	82.5
77.5°	75.2	126.5	58.6	122.5	78.5
80°	67.2	95.9	44.6	97.2	70.6
82.5°	57.2	69.9	35.9	71.9	59.2
85°	39.3	51.3	33.3	51.3	41.3
87.5°	18.6	30.6	20.6	29.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)