

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: P293994

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293994
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-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4201.0 lumens
Efficiency: N/A
Efficacy: 146.7 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

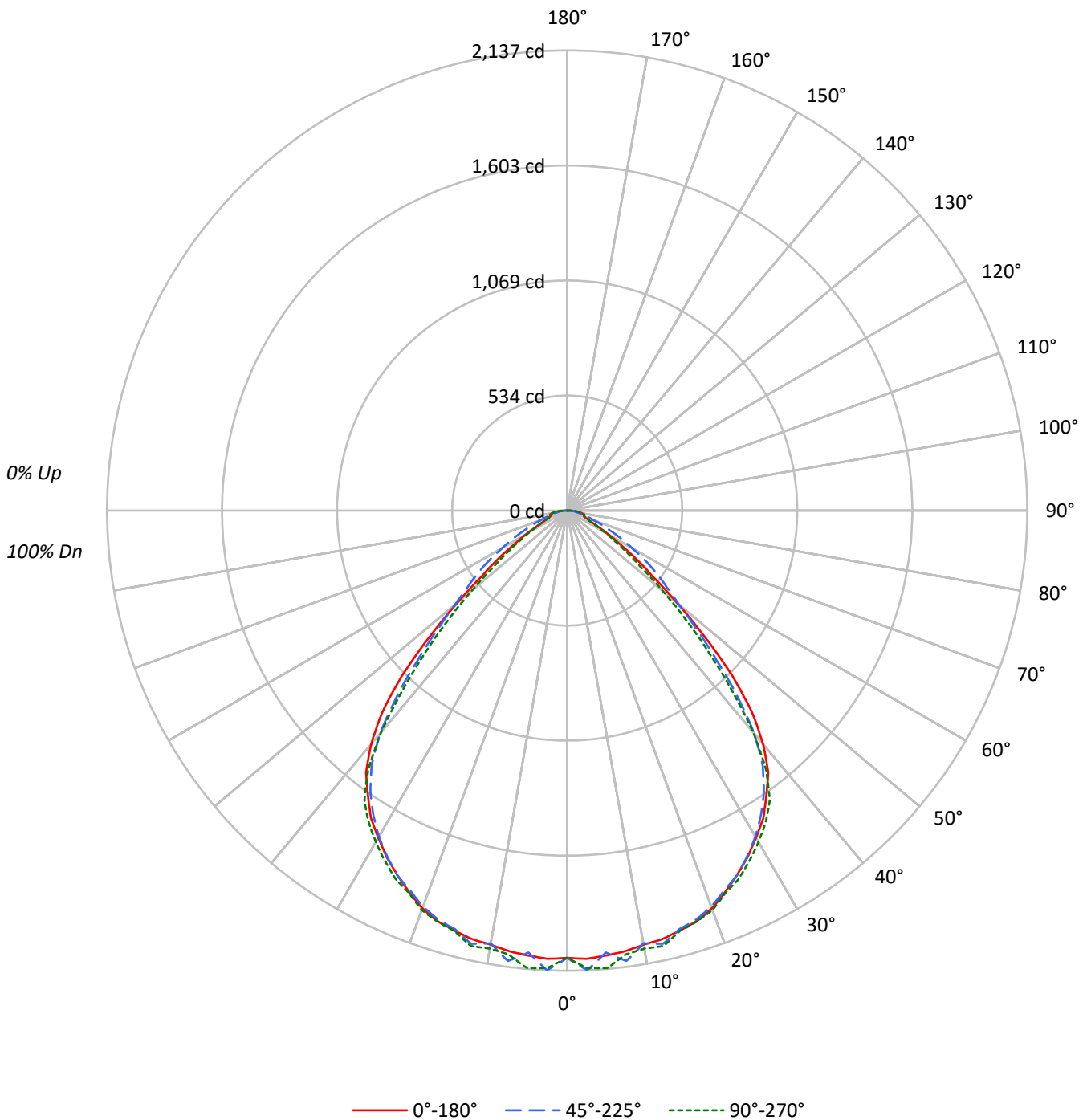
Input Watts (W): 28.644
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2795	2795	2795
5°	2801	2783	2881
10°	2797	2788	2822
15°	2813	2803	2815
20°	2815	2803	2827
25°	2771	2773	2800
30°	2725	2717	2761
35°	2648	2616	2695
40°	2487	2376	2363
45°	2062	1865	1769
50°	1387	1415	1209
55°	915	1187	793
60°	586	937	543
65°	378	715	367
70°	334	512	334
75°	431	407	435
80°	528	350	554
85°	614	520	645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.9	4.7
10°-20°	571.1	13.6
20°-30°	859.8	20.5
30°-40°	996.5	23.7
40°-50°	778.4	18.5
50°-60°	415.7	9.9
60°-70°	213.8	5.1
70°-80°	120.9	2.9
80°-90°	45.9	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°	1629.8	38.8
0°-40°	2626.3	62.5
0°-60°	3820.4	90.9
0°-90°	4201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2077	2077	2077	2077	2077	
5°	2074	2132	2060	2117	2133	197
15°	2019	2032	2012	2025	2021	570
25°	1867	1861	1868	1865	1886	860
35°	1612	1605	1593	1625	1641	1005
45°	1084	1084	980	972	930	816
55°	390	493	506	456	338	360
65°	119	248	225	247	115	130
75°	83	156	78	146	84	84
85°	40	52	34	52	42	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2077.3	2077.3	2077.3	2077.3	2077.3
2.5°	2084.0	2121.8	2136.6	2118.4	2126.5
5°	2073.9	2131.9	2060.4	2117.1	2133.3
7.5°	2064.5	2058.4	2110.3	2056.4	2079.3
10°	2046.9	2051.0	2040.8	2079.3	2065.8
12.5°	2038.8	2062.4	2060.4	2040.8	2070.5
15°	2019.3	2032.1	2012.5	2025.3	2020.6
17.5°	1999.7	1993.6	1991.6	1997.0	2001.7
20°	1966.0	1945.7	1957.9	1959.2	1974.1
22.5°	1917.4	1905.2	1907.9	1920.1	1921.4
25°	1866.8	1860.7	1868.1	1865.4	1886.3
27.5°	1814.2	1806.1	1810.8	1820.9	1833.7
30°	1754.1	1752.1	1748.7	1757.5	1777.1
32.5°	1694.7	1678.6	1675.9	1694.1	1716.3
35°	1612.4	1605.0	1592.9	1624.6	1640.8
37.5°	1534.2	1511.2	1491.7	1510.6	1517.3
40°	1416.1	1398.6	1352.7	1354.7	1345.3
42.5°	1271.1	1258.2	1170.5	1155.0	1128.7
45°	1083.5	1084.2	980.3	971.5	929.7
47.5°	865.6	904.0	813.6	803.5	741.4
50°	662.5	732.0	676.0	659.8	577.5
52.5°	497.2	599.1	581.6	546.5	433.1
55°	390.0	493.2	506.0	456.1	338.0
57.5°	293.5	406.1	427.1	385.9	261.1
60°	217.9	342.1	348.1	331.9	201.7
62.5°	161.9	290.8	282.7	284.7	149.8
65°	118.7	247.6	224.7	246.9	115.4
67.5°	97.2	214.5	174.7	213.9	93.8
70°	85.0	190.3	130.2	188.2	85.0
72.5°	82.3	174.7	103.2	167.3	83.0
75°	83.0	155.8	78.3	145.7	83.7
77.5°	76.2	128.2	59.4	124.1	79.6
80°	68.1	97.2	45.2	98.5	71.5
82.5°	58.0	70.8	36.4	72.9	60.0
85°	39.8	51.9	33.7	51.9	41.8
87.5°	18.9	31.0	20.9	29.7	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)