

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: P291536

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A19/156-UNV-L92765-W2A1-U-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4026.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

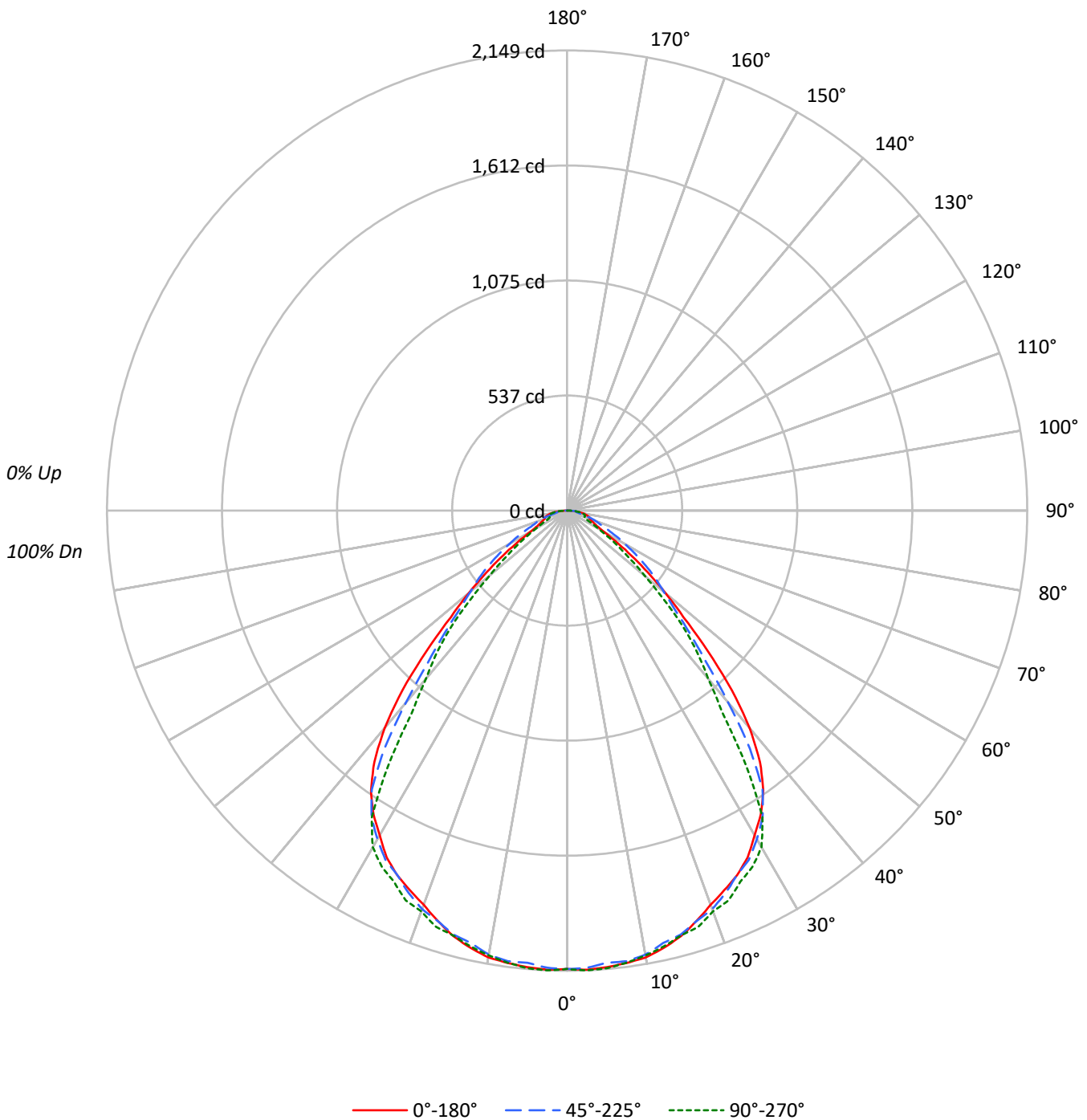
Input Watts (W): 38.223
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	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	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5761	5761	5761
5°	5780	5726	5793
10°	5790	5754	5764
15°	5731	5710	5723
20°	5611	5672	5703
25°	5577	5574	5681
30°	5441	5507	5641
35°	5247	5226	4802
40°	4659	4111	3600
45°	3535	3076	2911
50°	2508	2462	1976
55°	1717	2101	1358
60°	1061	1676	908
65°	874	1291	657
70°	870	1124	674
75°	1045	805	900
80°	1199	742	1128
85°	1139	1309	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.1	5.0
10°-20°	579.8	14.4
20°-30°	871.9	21.7
30°-40°	950.5	23.6
40°-50°	665.5	16.5
50°-60°	376.7	9.4
60°-70°	206.1	5.1
70°-80°	124.9	3.1
80°-90°	47.4	1.2
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°	1654.8	41.1
0°-40°	2605.3	64.7
0°-60°	3647.5	90.6
0°-90°	4026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2141	2141	2141	2141	2141	
5°	2140	2136	2120	2145	2145	204
15°	2057	2052	2050	2079	2054	579
25°	1878	1882	1877	1921	1913	863
35°	1597	1590	1591	1510	1462	984
45°	929	970	808	798	765	722
55°	366	438	448	444	289	334
65°	137	226	203	256	103	141
75°	100	145	77	152	87	104
85°	37	60	42	52	42	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2140.9	2140.9	2140.9	2140.9	2140.9
2.5°	2146.4	2143.6	2137.2	2150.1	2149.2
5°	2139.9	2136.3	2119.7	2144.6	2144.6
7.5°	2130.7	2121.5	2122.4	2136.3	2129.8
10°	2118.8	2103.1	2105.8	2109.5	2109.5
12.5°	2091.1	2076.4	2069.0	2081.0	2084.7
15°	2057.0	2051.5	2049.6	2079.1	2054.2
17.5°	2009.1	2021.1	2010.0	2034.0	2037.7
20°	1959.3	1982.4	1980.5	1997.1	1991.6
22.5°	1918.8	1933.5	1933.5	1953.8	1970.4
25°	1878.2	1881.9	1877.3	1920.6	1913.2
27.5°	1825.7	1822.9	1837.7	1859.8	1874.5
30°	1751.0	1752.0	1772.2	1801.7	1815.5
32.5°	1682.8	1674.5	1699.4	1712.3	1697.6
35°	1597.1	1589.8	1590.7	1509.6	1461.7
37.5°	1480.1	1486.5	1401.7	1253.4	1190.7
40°	1326.2	1339.1	1170.4	1059.8	1024.8
42.5°	1140.0	1143.7	959.4	923.4	900.4
45°	929.0	969.5	808.2	798.1	764.9
47.5°	736.4	811.9	677.4	683.8	604.6
50°	599.0	674.6	588.0	590.7	471.9
52.5°	473.7	547.4	518.9	510.6	370.5
55°	365.9	437.8	447.9	444.2	289.4
57.5°	269.1	346.5	376.0	389.8	223.0
60°	197.2	282.9	311.5	339.1	168.7
62.5°	156.7	245.1	255.3	295.8	130.9
65°	137.3	225.8	202.8	256.2	103.2
67.5°	122.6	214.7	165.0	226.7	90.3
70°	110.6	193.5	142.8	202.8	85.7
72.5°	110.6	169.6	112.4	179.7	86.6
75°	100.5	144.7	77.4	152.1	86.6
77.5°	89.4	123.5	58.1	123.5	81.1
80°	77.4	96.8	47.9	94.9	72.8
82.5°	57.1	72.8	41.5	71.0	59.0
85°	36.9	59.9	42.4	51.6	41.5
87.5°	17.5	30.4	26.7	25.8	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)