

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: P291433

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291433
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-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4234.0 lumens
Efficiency: N/A
Efficacy: 114.4 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

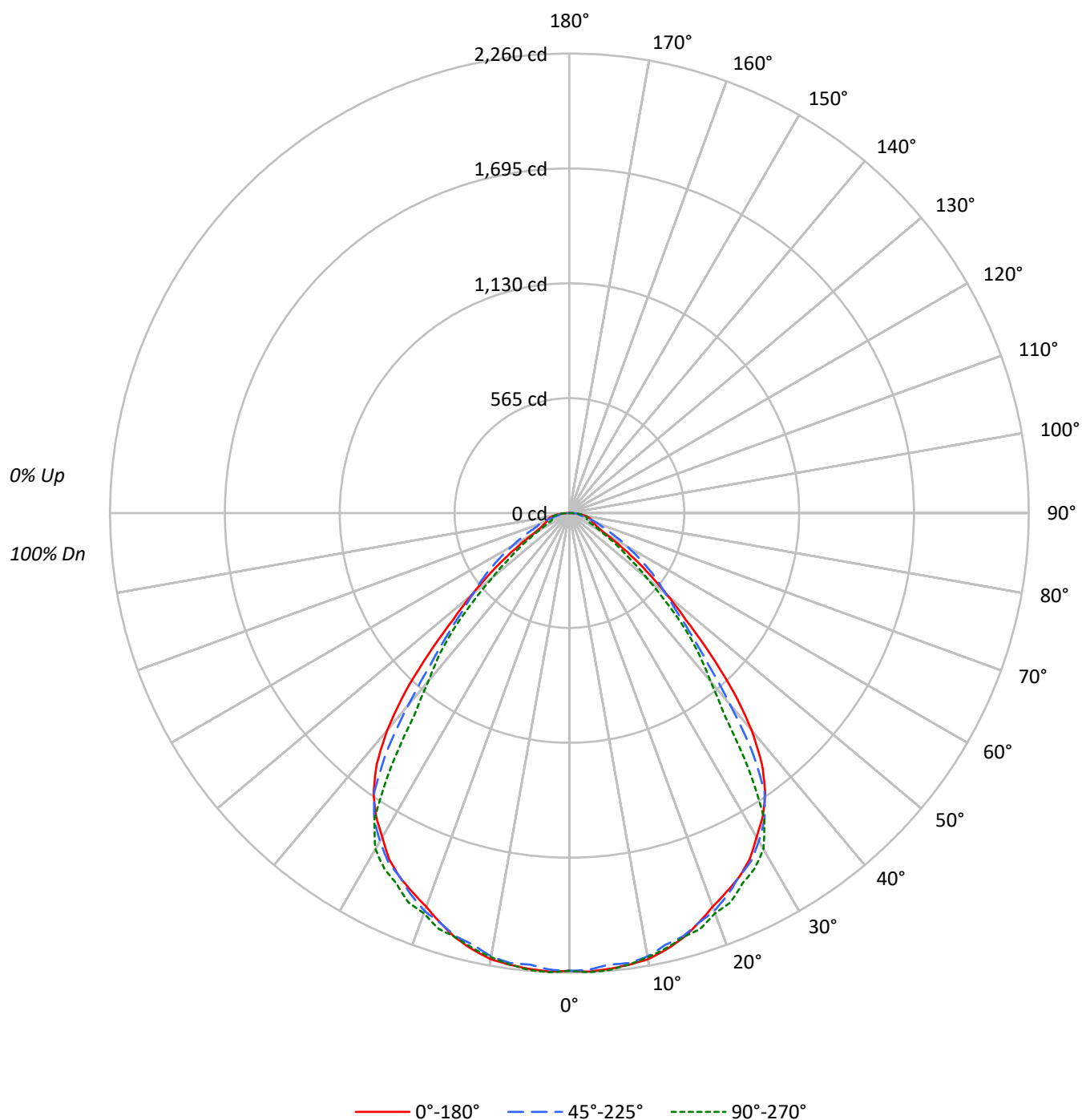
Input Watts (W): 37.014
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6059	6059	6059
5°	6079	6022	6092
10°	6089	6051	6062
15°	6027	6005	6019
20°	5901	5964	5998
25°	5865	5862	5974
30°	5722	5791	5933
35°	5518	5496	5050
40°	4899	4324	3786
45°	3718	3235	3061
50°	2637	2589	2077
55°	1805	2210	1428
60°	1116	1763	955
65°	919	1358	691
70°	915	1182	709
75°	1098	846	947
80°	1261	781	1187
85°	1198	1377	1346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.6	5.0
10°-20°	609.7	14.4
20°-30°	916.9	21.7
30°-40°	999.6	23.6
40°-50°	699.9	16.5
50°-60°	396.2	9.4
60°-70°	216.8	5.1
70°-80°	131.4	3.1
80°-90°	49.8	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°	1740.3	41.1
0°-40°	2739.9	64.7
0°-60°	3836.0	90.6
0°-90°	4234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4234.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2252	2252	2252	2252	2252	
5°	2250	2247	2229	2255	2255	214
15°	2163	2158	2156	2186	2160	608
25°	1975	1979	1974	2020	2012	907
35°	1680	1672	1673	1588	1537	1035
45°	977	1020	850	839	804	759
55°	385	460	471	467	304	352
65°	144	238	213	269	109	148
75°	106	152	81	160	91	110
85°	39	63	45	54	44	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2251.5	2251.5	2251.5	2251.5	2251.5
2.5°	2257.3	2254.4	2247.6	2261.2	2260.2
5°	2250.5	2246.6	2229.2	2255.4	2255.4
7.5°	2240.8	2231.1	2232.1	2246.6	2239.8
10°	2228.2	2211.7	2214.6	2218.5	2218.5
12.5°	2199.1	2183.6	2175.9	2188.5	2192.4
15°	2163.3	2157.5	2155.5	2186.5	2160.4
17.5°	2112.9	2125.5	2113.8	2139.0	2142.9
20°	2060.5	2084.8	2082.8	2100.3	2094.5
22.5°	2017.9	2033.4	2033.4	2054.7	2072.2
25°	1975.3	1979.1	1974.3	2019.8	2012.1
27.5°	1920.0	1917.1	1932.6	1955.9	1971.4
30°	1841.5	1842.5	1863.8	1894.8	1909.3
32.5°	1769.8	1761.1	1787.2	1800.8	1785.3
35°	1679.6	1671.9	1672.9	1587.6	1537.2
37.5°	1556.6	1563.3	1474.2	1318.1	1252.2
40°	1394.7	1408.3	1230.9	1114.6	1077.8
42.5°	1198.9	1202.8	1008.9	971.1	946.9
45°	977.0	1019.6	850.0	839.3	804.4
47.5°	774.4	853.9	712.4	719.2	635.8
50°	630.0	709.5	618.4	621.3	496.2
52.5°	498.2	575.7	545.7	536.9	389.6
55°	384.8	460.4	471.0	467.2	304.3
57.5°	283.0	364.4	395.4	410.0	234.5
60°	207.4	297.5	327.6	356.7	177.4
62.5°	164.8	257.8	268.5	311.1	137.6
65°	144.4	237.5	213.2	269.4	108.6
67.5°	128.9	225.8	173.5	238.4	95.0
70°	116.3	203.5	150.2	213.2	90.1
72.5°	116.3	178.3	118.2	189.0	91.1
75°	105.6	152.2	81.4	159.9	91.1
77.5°	94.0	129.9	61.1	129.9	85.3
80°	81.4	101.8	50.4	99.8	76.6
82.5°	60.1	76.6	43.6	74.6	62.0
85°	38.8	63.0	44.6	54.3	43.6
87.5°	18.4	32.0	28.1	27.1	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)