

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: P291432

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291432
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-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4143.0 lumens
Efficiency: N/A
Efficacy: 112.8 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

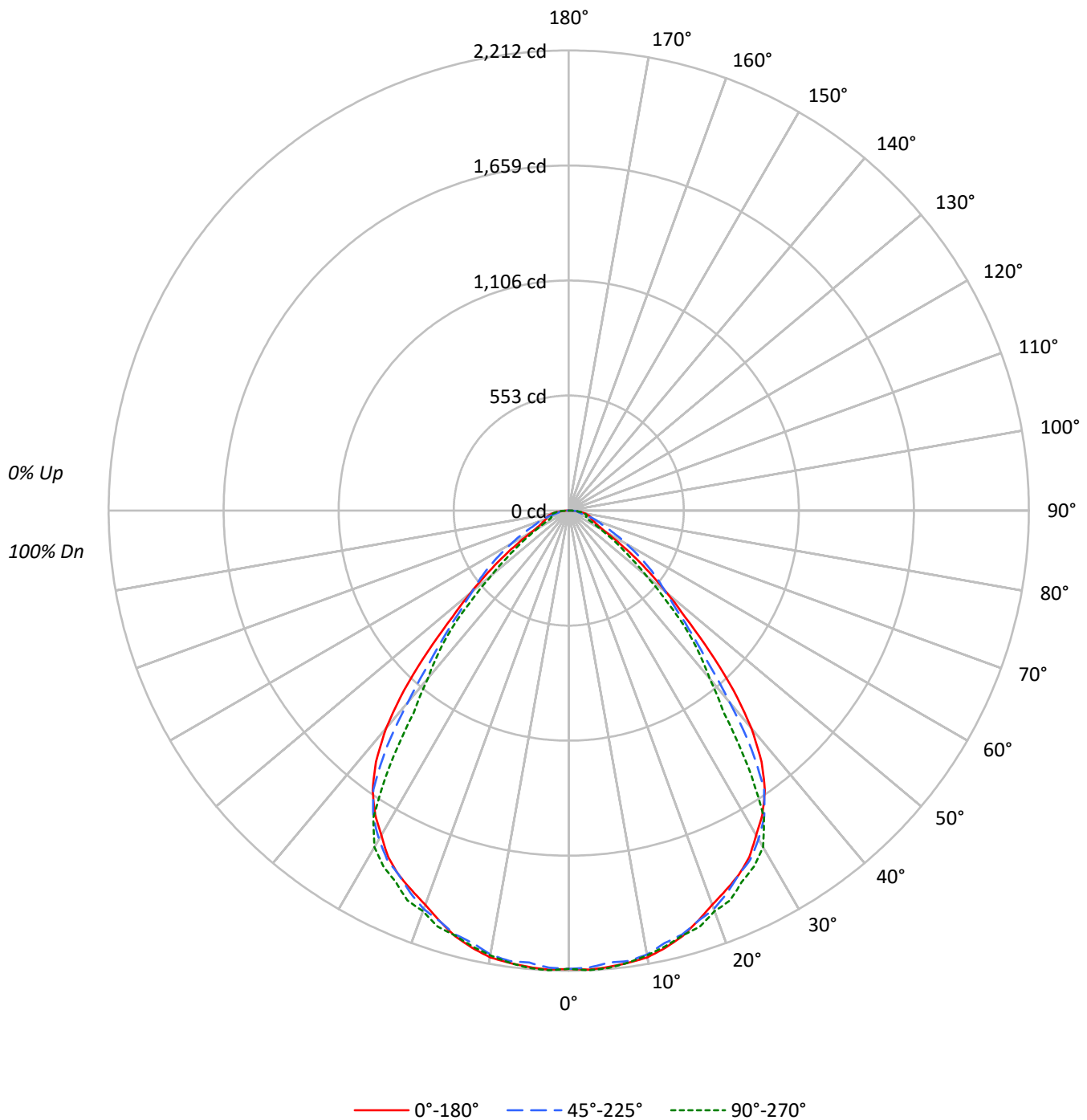
Input Watts (W): 36.735
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5928	5928	5928
5°	5948	5892	5961
10°	5958	5921	5932
15°	5897	5876	5889
20°	5774	5836	5869
25°	5739	5736	5846
30°	5599	5667	5805
35°	5399	5377	4941
40°	4794	4231	3705
45°	3638	3165	2996
50°	2581	2533	2033
55°	1766	2162	1397
60°	1093	1725	934
65°	900	1328	676
70°	895	1157	694
75°	1075	829	926
80°	1235	764	1161
85°	1170	1346	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.0	5.0
10°-20°	596.6	14.4
20°-30°	897.2	21.7
30°-40°	978.1	23.6
40°-50°	684.9	16.5
50°-60°	387.7	9.4
60°-70°	212.1	5.1
70°-80°	128.6	3.1
80°-90°	48.7	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°	1702.9	41.1
0°-40°	2681.0	64.7
0°-60°	3753.5	90.6
0°-90°	4143.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4143.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2203	2203	2203	2203	2203	
5°	2202	2198	2181	2207	2207	209
15°	2117	2111	2109	2140	2114	595
25°	1933	1937	1932	1976	1969	888
35°	1644	1636	1637	1553	1504	1013
45°	956	998	832	821	787	742
55°	376	450	461	457	298	344
65°	141	232	209	264	106	145
75°	103	149	80	156	89	107
85°	38	62	44	53	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2203.1	2203.1	2203.1	2203.1	2203.1
2.5°	2208.8	2205.9	2199.3	2212.6	2211.6
5°	2202.1	2198.3	2181.3	2206.9	2206.9
7.5°	2192.7	2183.2	2184.1	2198.3	2191.7
10°	2180.3	2164.2	2167.0	2170.8	2170.8
12.5°	2151.9	2136.7	2129.1	2141.4	2145.2
15°	2116.8	2111.1	2109.2	2139.5	2113.9
17.5°	2067.5	2079.8	2068.4	2093.1	2096.9
20°	2016.3	2040.0	2038.1	2055.1	2049.4
22.5°	1974.5	1989.7	1989.7	2010.6	2027.6
25°	1932.8	1936.6	1931.8	1976.4	1968.8
27.5°	1878.7	1875.9	1891.1	1913.8	1929.0
30°	1801.9	1802.9	1823.7	1854.1	1868.3
32.5°	1731.7	1723.2	1748.8	1762.1	1746.9
35°	1643.5	1636.0	1636.9	1553.4	1504.1
37.5°	1523.1	1529.7	1442.5	1289.8	1225.3
40°	1364.7	1378.0	1204.4	1090.6	1054.6
42.5°	1173.1	1176.9	987.3	950.3	926.6
45°	956.0	997.7	831.7	821.3	787.2
47.5°	757.8	835.5	697.1	703.7	622.1
50°	616.4	694.2	605.1	607.9	485.6
52.5°	487.5	563.3	533.9	525.4	381.2
55°	376.5	450.5	460.9	457.1	297.8
57.5°	276.9	356.6	386.9	401.2	229.5
60°	203.0	291.2	320.6	349.0	173.6
62.5°	161.2	252.3	262.7	304.4	134.7
65°	141.3	232.4	208.6	263.6	106.2
67.5°	126.1	221.0	169.8	233.3	92.9
70°	113.8	199.2	147.0	208.6	88.2
72.5°	113.8	174.5	115.7	184.9	89.1
75°	103.4	148.9	79.7	156.5	89.1
77.5°	92.0	127.1	59.7	127.1	83.5
80°	79.7	99.6	49.3	97.7	74.9
82.5°	58.8	74.9	42.7	73.0	60.7
85°	37.9	61.6	43.6	53.1	42.7
87.5°	18.0	31.3	27.5	26.6	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)