

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: P291505

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291505
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-LD5-32-A19/156-UNV-L92765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2881.0 lumens
Efficiency: N/A
Efficacy: 110.2 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

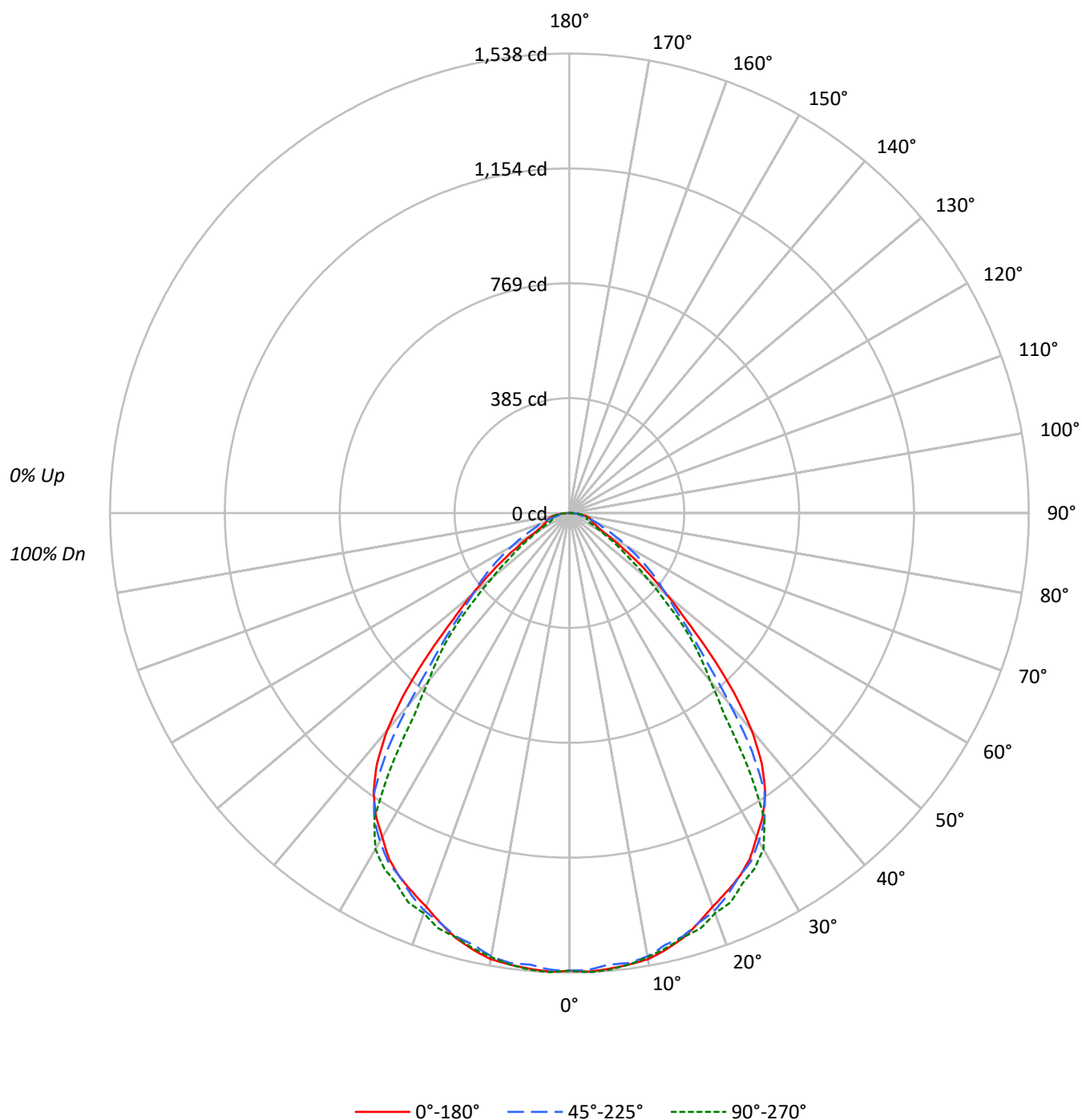
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68		
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61		
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4123	4123	4123
5°	4136	4097	4145
10°	4143	4118	4125
15°	4101	4086	4095
20°	4015	4059	4081
25°	3991	3989	4065
30°	3893	3941	4037
35°	3755	3739	3436
40°	3334	2942	2576
45°	2530	2201	2083
50°	1795	1762	1414
55°	1228	1504	972
60°	759	1200	650
65°	626	924	471
70°	622	804	482
75°	748	576	645
80°	859	532	807
85°	815	936	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.4	5.0
10°-20°	414.9	14.4
20°-30°	623.9	21.7
30°-40°	680.2	23.6
40°-50°	476.3	16.5
50°-60°	269.6	9.4
60°-70°	147.5	5.1
70°-80°	89.4	3.1
80°-90°	33.9	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°	1184.2	41.1
0°-40°	1864.3	64.7
0°-60°	2610.2	90.6
0°-90°	2881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1532	1532	1532	1532	1532	
5°	1531	1529	1517	1535	1535	146
15°	1472	1468	1467	1488	1470	414
25°	1344	1347	1343	1374	1369	617
35°	1143	1138	1138	1080	1046	704
45°	665	694	578	571	547	516
55°	262	313	320	318	207	239
65°	98	162	145	183	74	101
75°	72	104	55	109	62	75
85°	26	43	30	37	30	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1532.0	1532.0	1532.0	1532.0	1532.0
2.5°	1536.0	1534.0	1529.4	1538.6	1537.9
5°	1531.3	1528.7	1516.8	1534.6	1534.6
7.5°	1524.7	1518.2	1518.8	1528.7	1524.1
10°	1516.2	1505.0	1506.9	1509.6	1509.6
12.5°	1496.4	1485.8	1480.6	1489.1	1491.8
15°	1472.0	1468.0	1466.7	1487.8	1470.0
17.5°	1437.7	1446.3	1438.4	1455.5	1458.1
20°	1402.1	1418.6	1417.3	1429.1	1425.2
22.5°	1373.1	1383.6	1383.6	1398.1	1410.0
25°	1344.0	1346.7	1343.4	1374.4	1369.1
27.5°	1306.5	1304.5	1315.0	1330.9	1341.4
30°	1253.0	1253.7	1268.2	1289.3	1299.2
32.5°	1204.2	1198.3	1216.1	1225.3	1214.8
35°	1142.9	1137.6	1138.3	1080.3	1046.0
37.5°	1059.1	1063.8	1003.1	896.9	852.1
40°	949.0	958.2	837.6	758.4	733.4
42.5°	815.8	818.4	686.5	660.8	644.3
45°	664.8	693.8	578.4	571.1	547.4
47.5°	526.9	581.0	484.7	489.3	432.6
50°	428.7	482.7	420.8	422.7	337.7
52.5°	339.0	391.7	371.3	365.4	265.1
55°	261.8	313.3	320.5	317.9	207.1
57.5°	192.6	248.0	269.1	279.0	159.6
60°	141.1	202.5	222.9	242.7	120.7
62.5°	112.1	175.4	182.7	211.7	93.6
65°	98.3	161.6	145.1	183.3	73.9
67.5°	87.7	153.7	118.0	162.2	64.6
70°	79.1	138.5	102.2	145.1	61.3
72.5°	79.1	121.3	80.5	128.6	62.0
75°	71.9	103.5	55.4	108.8	62.0
77.5°	64.0	88.4	41.5	88.4	58.0
80°	55.4	69.2	34.3	67.9	52.1
82.5°	40.9	52.1	29.7	50.8	42.2
85°	26.4	42.9	30.3	36.9	29.7
87.5°	12.5	21.8	19.1	18.5	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)