

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: P291402

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291402
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-LD5-28-A19/156-UNV-L82765-W2A1-U-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2928.0 lumens
Efficiency: N/A
Efficacy: 125.9 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

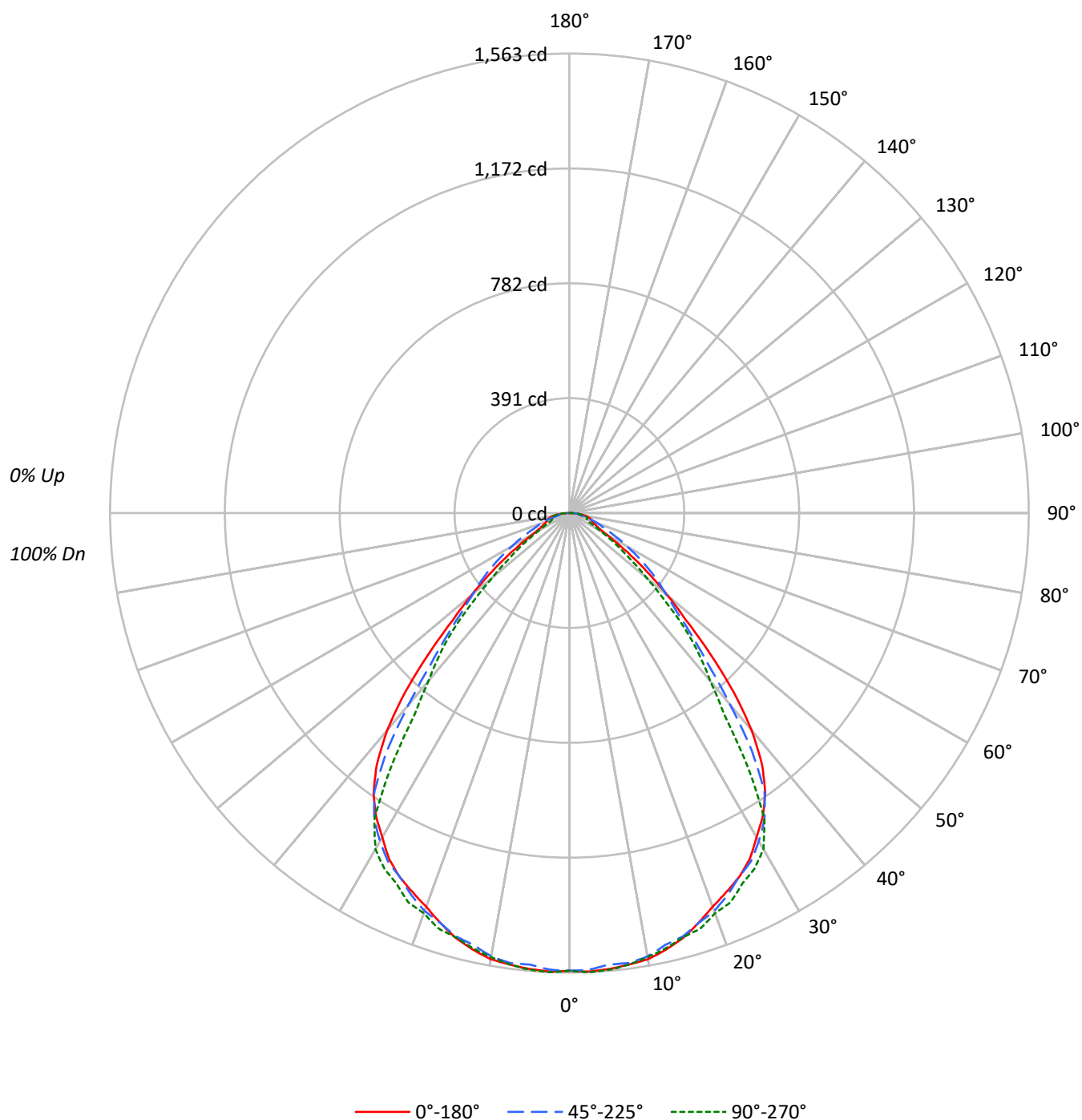
Input Watts (W): 23.25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
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°	4190	4190	4190
5°	4204	4164	4213
10°	4210	4185	4192
15°	4168	4153	4162
20°	4081	4125	4148
25°	4056	4054	4131
30°	3957	4005	4103
35°	3816	3801	3492
40°	3388	2990	2618
45°	2571	2237	2117
50°	1824	1790	1437
55°	1248	1528	988
60°	772	1219	660
65°	636	939	478
70°	633	817	490
75°	760	585	655
80°	872	541	820
85°	827	951	932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.7	5.0
10°-20°	421.7	14.4
20°-30°	634.1	21.7
30°-40°	691.3	23.6
40°-50°	484.0	16.5
50°-60°	274.0	9.4
60°-70°	149.9	5.1
70°-80°	90.9	3.1
80°-90°	34.4	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°	1203.5	41.1
0°-40°	1894.7	64.7
0°-60°	2652.8	90.6
0°-90°	2928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1557	1557	1557	1557	1557	
5°	1556	1554	1542	1560	1560	148
15°	1496	1492	1491	1512	1494	421
25°	1366	1369	1365	1397	1391	627
35°	1162	1156	1157	1098	1063	716
45°	676	705	588	580	556	525
55°	266	318	326	323	210	243
65°	100	164	148	186	75	103
75°	73	105	56	111	63	76
85°	27	44	31	38	30	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1557.0	1557.0	1557.0	1557.0	1557.0
2.5°	1561.0	1559.0	1554.3	1563.7	1563.0
5°	1556.3	1553.6	1541.6	1559.7	1559.7
7.5°	1549.6	1542.9	1543.6	1553.6	1549.0
10°	1540.9	1529.5	1531.5	1534.2	1534.2
12.5°	1520.8	1510.1	1504.7	1513.4	1516.1
15°	1496.0	1492.0	1490.6	1512.1	1494.0
17.5°	1461.2	1469.9	1461.8	1479.2	1481.9
20°	1425.0	1441.7	1440.4	1452.4	1448.4
22.5°	1395.5	1406.2	1406.2	1420.9	1433.0
25°	1366.0	1368.7	1365.3	1396.8	1391.4
27.5°	1327.8	1325.8	1336.5	1352.6	1363.3
30°	1273.5	1274.1	1288.9	1310.3	1320.4
32.5°	1223.9	1217.8	1235.9	1245.3	1234.6
35°	1161.5	1156.2	1156.9	1097.9	1063.0
37.5°	1076.4	1081.1	1019.5	911.5	866.0
40°	964.5	973.9	851.2	770.8	745.3
42.5°	829.1	831.8	697.7	671.6	654.8
45°	675.6	705.1	587.8	580.4	556.3
47.5°	535.5	590.5	492.6	497.3	439.7
50°	435.7	490.6	427.6	429.6	343.2
52.5°	344.5	398.1	377.4	371.3	269.4
55°	266.1	318.4	325.7	323.1	210.5
57.5°	195.7	252.0	273.5	283.5	162.2
60°	143.4	205.8	226.5	246.7	122.7
62.5°	113.9	178.3	185.7	215.2	95.2
65°	99.9	164.2	147.5	186.3	75.1
67.5°	89.1	156.2	120.0	164.9	65.7
70°	80.4	140.8	103.9	147.5	62.3
72.5°	80.4	123.3	81.8	130.7	63.0
75°	73.1	105.2	56.3	110.6	63.0
77.5°	65.0	89.8	42.2	89.8	59.0
80°	56.3	70.4	34.9	69.0	52.9
82.5°	41.6	52.9	30.2	51.6	42.9
85°	26.8	43.6	30.8	37.5	30.2
87.5°	12.7	22.1	19.4	18.8	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)