

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: P291500

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291500
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-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: 2659.0 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

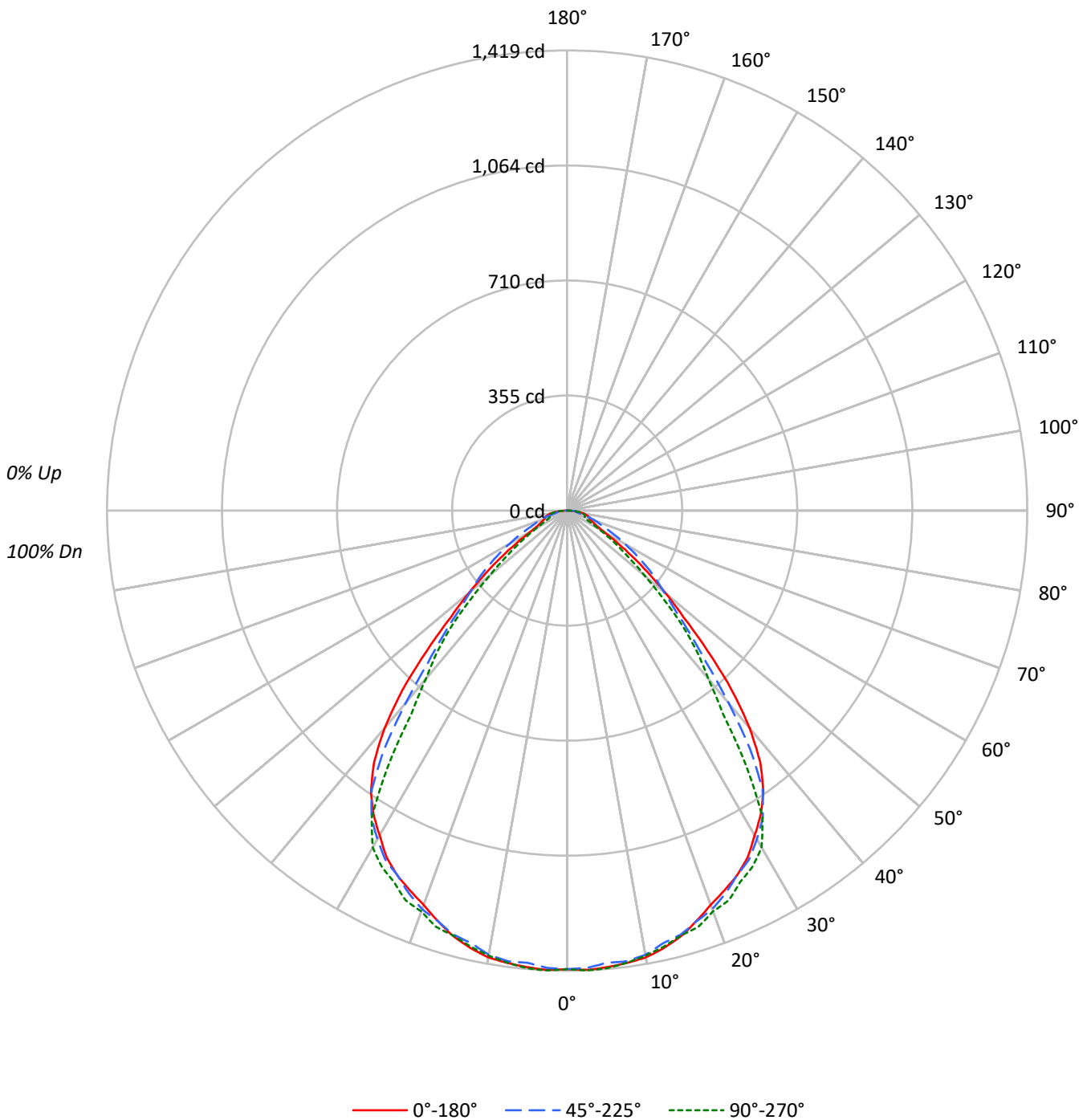
Input Watts (W): 23.25
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3805	3805	3805
5°	3818	3782	3826
10°	3824	3800	3807
15°	3785	3771	3780
20°	3706	3746	3767
25°	3683	3681	3752
30°	3594	3637	3726
35°	3465	3451	3171
40°	3077	2715	2377
45°	2335	2031	1923
50°	1656	1626	1304
55°	1133	1388	897
60°	701	1107	600
65°	578	853	434
70°	574	742	445
75°	689	531	595
80°	792	491	745
85°	750	865	846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	5.0
10°-20°	382.9	14.4
20°-30°	575.8	21.7
30°-40°	627.8	23.6
40°-50°	439.6	16.5
50°-60°	248.8	9.4
60°-70°	136.1	5.1
70°-80°	82.5	3.1
80°-90°	31.3	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°	1092.9	41.1
0°-40°	1720.7	64.7
0°-60°	2409.1	90.6
0°-90°	2659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1414	1414	1414	1414	1414	
5°	1413	1411	1400	1416	1416	134
15°	1359	1355	1354	1373	1357	382
25°	1240	1243	1240	1268	1264	570
35°	1055	1050	1051	997	965	650
45°	614	640	534	527	505	476
55°	242	289	296	293	191	221
65°	91	149	134	169	68	93
75°	66	96	51	100	57	69
85°	24	40	28	34	27	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1414.0	1414.0	1414.0	1414.0	1414.0
2.5°	1417.6	1415.8	1411.5	1420.0	1419.4
5°	1413.3	1410.9	1400.0	1416.4	1416.4
7.5°	1407.3	1401.2	1401.8	1410.9	1406.6
10°	1399.3	1389.0	1390.8	1393.3	1393.3
12.5°	1381.1	1371.3	1366.5	1374.4	1376.8
15°	1358.6	1354.9	1353.7	1373.2	1356.7
17.5°	1326.9	1334.8	1327.5	1343.3	1345.8
20°	1294.0	1309.3	1308.0	1319.0	1315.3
22.5°	1267.3	1277.0	1277.0	1290.4	1301.3
25°	1240.5	1242.9	1239.9	1268.5	1263.6
27.5°	1205.8	1204.0	1213.7	1228.3	1238.0
30°	1156.5	1157.1	1170.5	1190.0	1199.1
32.5°	1111.4	1106.0	1122.4	1130.9	1121.2
35°	1054.8	1050.0	1050.6	997.0	965.4
37.5°	977.5	981.8	925.8	827.8	786.4
40°	875.9	884.4	773.0	700.0	676.8
42.5°	752.9	755.4	633.6	609.9	594.7
45°	613.5	640.3	533.8	527.1	505.2
47.5°	486.3	536.2	447.4	451.6	399.3
50°	395.6	445.6	388.3	390.2	311.6
52.5°	312.9	361.6	342.7	337.2	244.7
55°	241.6	289.1	295.8	293.4	191.1
57.5°	177.7	228.9	248.3	257.5	147.3
60°	130.3	186.9	205.7	224.0	111.4
62.5°	103.5	161.9	168.6	195.4	86.4
65°	90.7	149.1	133.9	169.2	68.2
67.5°	81.0	141.8	109.0	149.7	59.7
70°	73.0	127.8	94.3	133.9	56.6
72.5°	73.0	112.0	74.3	118.7	57.2
75°	66.3	95.6	51.1	100.4	57.2
77.5°	59.0	81.6	38.3	81.6	53.6
80°	51.1	63.9	31.7	62.7	48.1
82.5°	37.7	48.1	27.4	46.9	39.0
85°	24.3	39.6	28.0	34.1	27.4
87.5°	11.6	20.1	17.7	17.0	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)