

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: P291504

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291504
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-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2808.0 lumens
Efficiency: N/A
Efficacy: 108.2 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

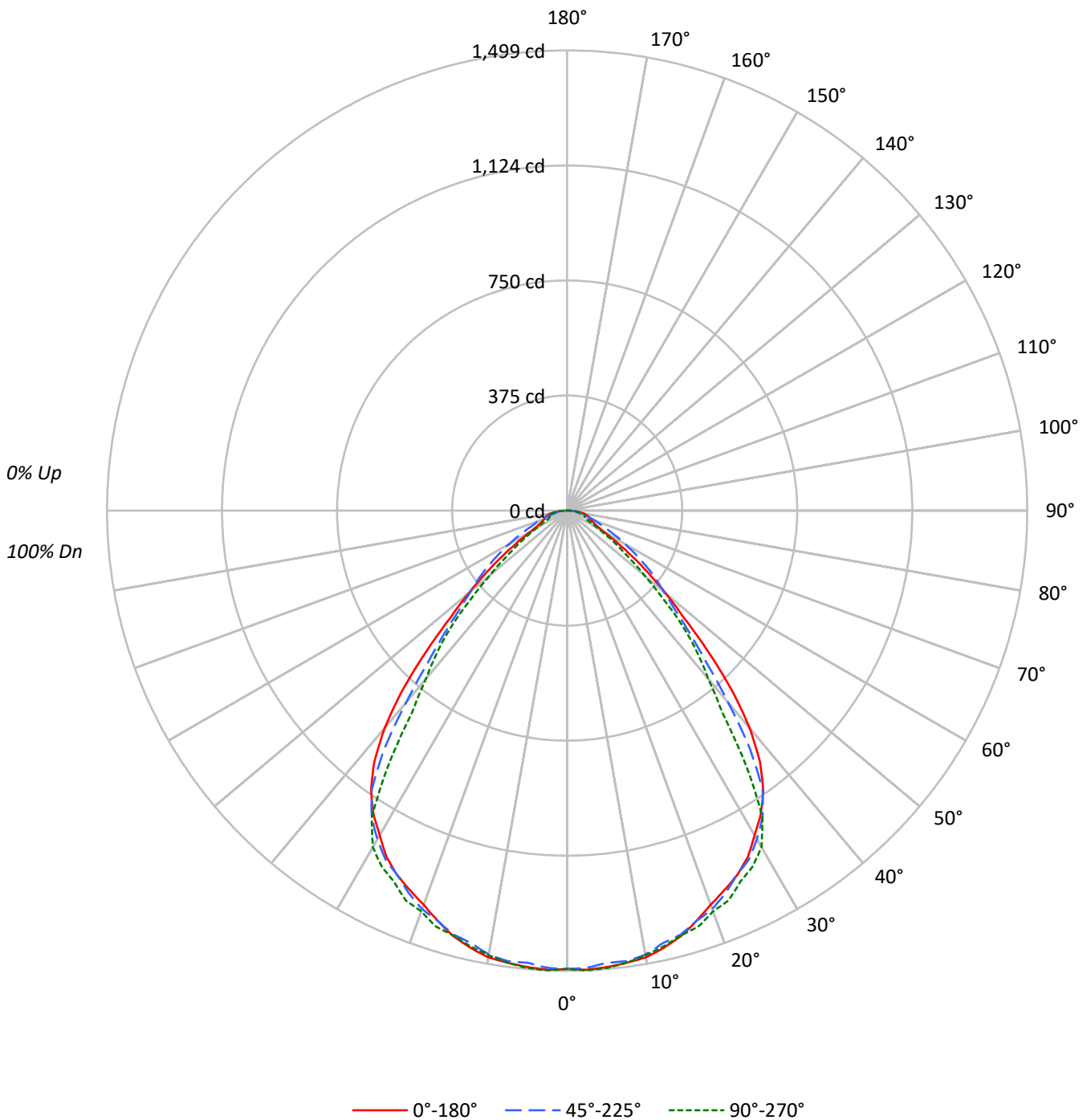
Input Watts (W): 25.947
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	4018	4018	4018
5°	4032	3994	4041
10°	4038	4013	4020
15°	3997	3982	3992
20°	3914	3956	3978
25°	3890	3888	3962
30°	3795	3841	3935
35°	3659	3644	3349
40°	3249	2868	2511
45°	2466	2145	2030
50°	1749	1717	1378
55°	1197	1466	947
60°	741	1169	633
65°	610	900	458
70°	607	784	471
75°	729	561	628
80°	837	518	787
85°	794	914	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	5.0
10°-20°	404.4	14.4
20°-30°	608.1	21.7
30°-40°	662.9	23.6
40°-50°	464.2	16.5
50°-60°	262.8	9.4
60°-70°	143.8	5.1
70°-80°	87.1	3.1
80°-90°	33.0	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°	1154.2	41.1
0°-40°	1817.1	64.7
0°-60°	2544.0	90.6
0°-90°	2808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1492	1490	1478	1496	1496	142
15°	1435	1431	1430	1450	1433	404
25°	1310	1313	1309	1340	1334	602
35°	1114	1109	1109	1053	1020	686
45°	648	676	564	557	534	503
55°	255	305	312	310	202	233
65°	96	158	141	179	72	98
75°	70	101	54	106	60	73
85°	26	42	30	36	29	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.2	1493.2	1493.2	1493.2	1493.2
2.5°	1497.0	1495.1	1490.6	1499.6	1499.0
5°	1492.5	1490.0	1478.4	1495.8	1495.8
7.5°	1486.1	1479.7	1480.3	1490.0	1485.5
10°	1477.8	1466.8	1468.8	1471.3	1471.3
12.5°	1458.5	1448.2	1443.0	1451.4	1454.0
15°	1434.7	1430.8	1429.5	1450.1	1432.8
17.5°	1401.3	1409.6	1401.9	1418.6	1421.2
20°	1366.6	1382.6	1381.3	1392.9	1389.1
22.5°	1338.3	1348.6	1348.6	1362.7	1374.3
25°	1310.0	1312.6	1309.3	1339.6	1334.4
27.5°	1273.4	1271.4	1281.7	1297.1	1307.4
30°	1221.3	1221.9	1236.1	1256.6	1266.3
32.5°	1173.7	1167.9	1185.3	1194.3	1184.0
35°	1113.9	1108.8	1109.4	1052.9	1019.5
37.5°	1032.3	1036.8	977.7	874.2	830.5
40°	925.0	934.0	816.3	739.2	714.8
42.5°	795.1	797.7	669.1	644.1	628.0
45°	647.9	676.2	563.7	556.7	533.5
47.5°	513.6	566.3	472.4	476.9	421.7
50°	417.8	470.5	410.1	412.0	329.1
52.5°	330.4	381.8	361.9	356.1	258.4
55°	255.2	305.3	312.4	309.8	201.8
57.5°	187.7	241.7	262.3	271.9	155.6
60°	137.6	197.3	217.3	236.5	117.6
62.5°	109.3	171.0	178.1	206.3	91.3
65°	95.8	157.5	141.4	178.7	72.0
67.5°	85.5	149.8	115.1	158.1	63.0
70°	77.1	135.0	99.6	141.4	59.8
72.5°	77.1	118.3	78.4	125.3	60.4
75°	70.1	100.9	54.0	106.1	60.4
77.5°	62.3	86.1	40.5	86.1	56.6
80°	54.0	67.5	33.4	66.2	50.8
82.5°	39.9	50.8	28.9	49.5	41.1
85°	25.7	41.8	29.6	36.0	28.9
87.5°	12.2	21.2	18.6	18.0	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)