

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: P291454

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291454
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-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2474.0 lumens
Efficiency: N/A
Efficacy: 94.3 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

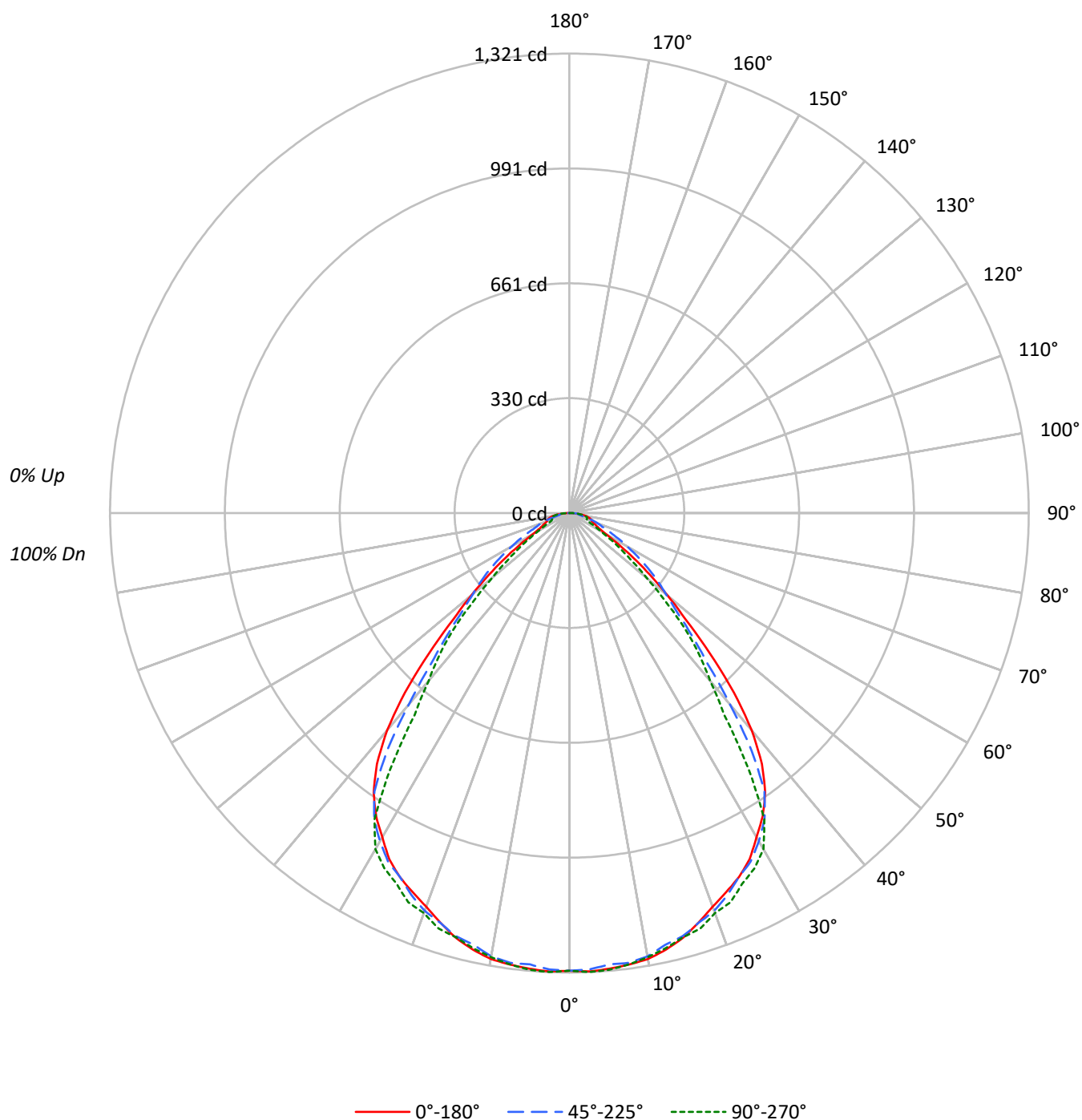
Input Watts (W): 26.226
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3540	3540	3540
5°	3552	3519	3560
10°	3558	3536	3542
15°	3521	3509	3517
20°	3448	3485	3505
25°	3427	3425	3491
30°	3343	3384	3467
35°	3224	3211	2951
40°	2863	2526	2212
45°	2173	1890	1789
50°	1541	1513	1214
55°	1055	1291	834
60°	652	1030	558
65°	537	793	404
70°	535	691	415
75°	642	495	553
80°	738	456	693
85°	701	806	787



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	5.0
10°-20°	356.3	14.4
20°-30°	535.8	21.7
30°-40°	584.1	23.6
40°-50°	409.0	16.5
50°-60°	231.5	9.4
60°-70°	126.7	5.1
70°-80°	76.8	3.1
80°-90°	29.1	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°	1016.9	41.1
0°-40°	1601.0	64.7
0°-60°	2241.4	90.6
0°-90°	2474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1315	1313	1303	1318	1318	125
15°	1264	1261	1260	1278	1262	355
25°	1154	1156	1154	1180	1176	530
35°	981	977	978	928	898	605
45°	571	596	497	490	470	443
55°	225	269	275	273	178	206
65°	84	139	125	157	63	87
75°	62	89	48	93	53	64
85°	23	37	26	32	26	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1315.6	1315.6	1315.6	1315.6	1315.6
2.5°	1319.0	1317.3	1313.3	1321.2	1320.7
5°	1315.0	1312.7	1302.6	1317.8	1317.8
7.5°	1309.3	1303.7	1304.3	1312.7	1308.8
10°	1302.0	1292.4	1294.1	1296.3	1296.3
12.5°	1285.0	1275.9	1271.4	1278.8	1281.0
15°	1264.0	1260.6	1259.5	1277.6	1262.3
17.5°	1234.6	1242.0	1235.2	1249.9	1252.1
20°	1204.0	1218.2	1217.0	1227.2	1223.8
22.5°	1179.1	1188.2	1188.2	1200.6	1210.8
25°	1154.2	1156.4	1153.6	1180.2	1175.7
27.5°	1121.9	1120.2	1129.3	1142.8	1151.9
30°	1076.0	1076.6	1089.0	1107.2	1115.7
32.5°	1034.1	1029.0	1044.3	1052.2	1043.2
35°	981.4	976.9	977.5	927.6	898.2
37.5°	909.5	913.5	861.4	770.2	731.7
40°	814.9	822.9	719.2	651.3	629.8
42.5°	700.5	702.8	589.5	567.5	553.3
45°	570.9	595.8	496.7	490.4	470.1
47.5°	452.5	498.9	416.3	420.2	371.5
50°	368.1	414.6	361.3	363.0	290.0
52.5°	291.1	336.4	318.8	313.7	227.7
55°	224.8	269.0	275.2	273.0	177.8
57.5°	165.4	212.9	231.1	239.6	137.1
60°	121.2	173.9	191.4	208.4	103.6
62.5°	96.3	150.6	156.9	181.8	80.4
65°	84.4	138.8	124.6	157.4	63.4
67.5°	75.3	132.0	101.4	139.3	55.5
70°	68.0	118.9	87.8	124.6	52.7
72.5°	68.0	104.2	69.1	110.4	53.2
75°	61.7	88.9	47.6	93.4	53.2
77.5°	54.9	75.9	35.7	75.9	49.8
80°	47.6	59.5	29.4	58.3	44.7
82.5°	35.1	44.7	25.5	43.6	36.2
85°	22.7	36.8	26.1	31.7	25.5
87.5°	10.8	18.7	16.4	15.9	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)