

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: P291063

Luminaire Tested: **14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2810.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

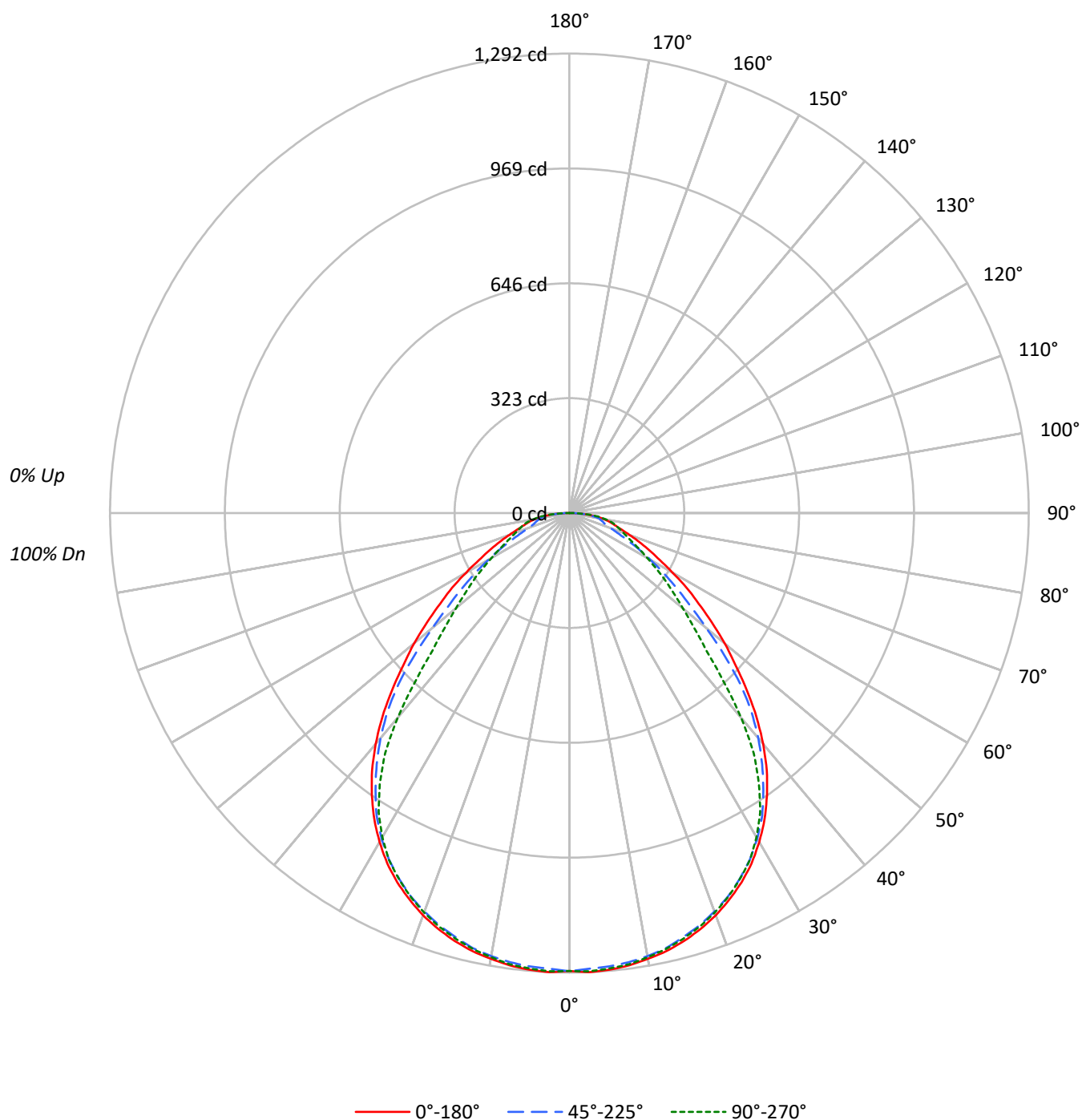
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291063

CATALOG NUMBER: 14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P291063

CATALOG NUMBER: 14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44		
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36		
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3465	3465	3465
5°	3482	3455	3473
10°	3478	3456	3465
15°	3471	3440	3451
20°	3446	3415	3424
25°	3401	3368	3370
30°	3318	3283	3269
35°	3182	3124	3053
40°	2978	2902	2641
45°	2690	2588	2064
50°	2385	2101	1746
55°	2082	1724	1540
60°	1806	1419	1359
65°	1584	1138	1255
70°	1412	965	1264
75°	1378	1018	1411
80°	1526	1285	1618
85°	1593	1371	1893



TEST NUMBER: P291063

CATALOG NUMBER: 14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	4.3
10°-20°	350.0	12.5
20°-30°	523.6	18.6
30°-40°	591.0	21.0
40°-50°	501.4	17.8
50°-60°	339.2	12.1
60°-70°	202.5	7.2
70°-80°	126.8	4.5
80°-90°	53.3	1.9
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°	995.7	35.4
0°-40°	1586.7	56.5
0°-60°	2427.3	86.4
0°-90°	2810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1289	1285	1279	1288	1286	123
15°	1246	1243	1235	1243	1239	351
25°	1145	1142	1134	1140	1135	527
35°	968	962	951	942	929	603
45°	707	709	680	583	542	545
55°	444	423	367	329	328	400
65°	249	206	179	191	197	249
75°	132	118	98	129	136	142
85°	52	49	44	57	61	56
90°	0	0	0	0	0	



TEST NUMBER: P291063

CATALOG NUMBER: 14GR-LD5-32-A-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1287.7	1287.7	1287.7	1287.7	1287.7
2.5°	1292.2	1288.3	1282.4	1290.3	1289.6
5°	1289.0	1285.1	1279.2	1288.3	1285.7
7.5°	1283.1	1279.8	1274.0	1282.4	1279.8
10°	1272.7	1270.0	1264.8	1272.0	1268.1
12.5°	1261.6	1259.6	1253.1	1259.6	1255.7
15°	1245.9	1243.3	1234.8	1243.3	1238.7
17.5°	1226.3	1223.1	1215.9	1223.1	1219.1
20°	1203.5	1199.6	1192.4	1199.6	1195.6
22.5°	1176.1	1172.8	1166.3	1172.8	1167.6
25°	1145.4	1141.5	1134.3	1139.5	1134.9
27.5°	1110.1	1104.9	1098.4	1102.3	1099.7
30°	1067.7	1061.2	1056.6	1056.6	1052.1
32.5°	1021.4	1016.8	1009.0	1004.4	998.5
35°	968.5	962.0	950.9	942.4	929.4
37.5°	911.7	903.9	890.2	868.7	851.0
40°	847.8	838.0	826.2	783.8	751.8
42.5°	779.3	777.3	757.1	684.6	640.2
45°	706.8	709.4	680.1	582.8	542.3
47.5°	633.7	642.9	589.3	494.1	473.2
50°	569.8	573.0	501.9	428.8	417.0
52.5°	503.8	498.6	428.1	377.2	368.7
55°	443.8	422.9	367.4	328.9	328.3
57.5°	390.9	352.4	313.9	285.2	288.5
60°	335.5	292.4	263.7	248.0	252.6
62.5°	286.5	245.4	219.9	215.4	223.2
65°	248.7	206.2	178.8	190.6	197.1
67.5°	212.8	176.9	145.5	173.6	176.2
70°	179.5	153.4	122.7	159.9	160.6
72.5°	152.1	135.7	106.4	144.9	146.8
75°	132.5	118.1	97.9	129.2	135.7
77.5°	116.2	101.2	90.7	111.6	122.7
80°	98.5	81.6	82.9	93.3	104.4
82.5°	75.7	63.3	65.9	77.0	84.8
85°	51.6	48.9	44.4	57.4	61.3
87.5°	27.4	26.1	22.8	32.6	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)