

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: P291068

Luminaire Tested: **14GR-LD5-36-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291068
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-LD5-36-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: 3141.0 lumens
Efficiency: N/A
Efficacy: 105.2 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

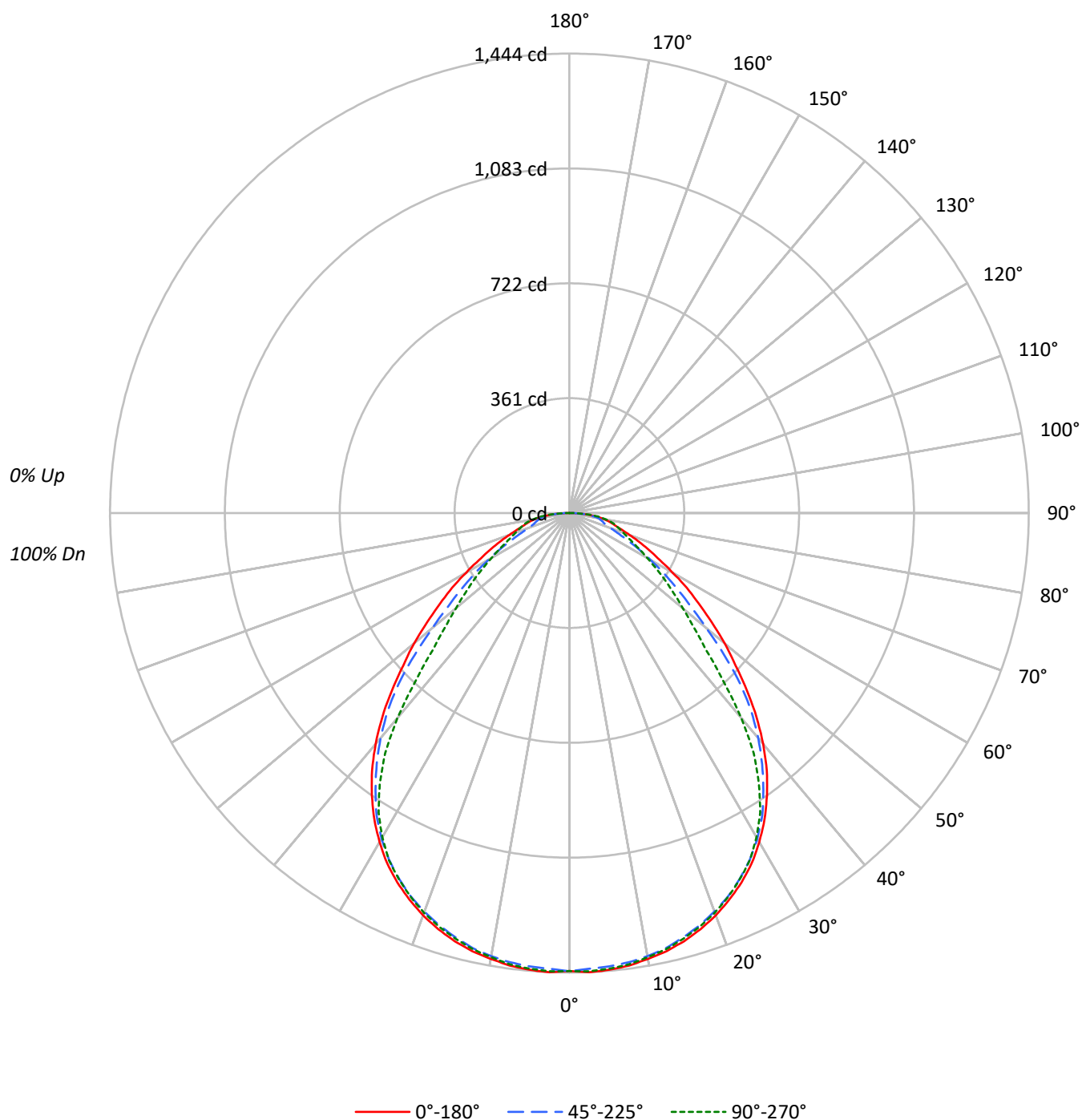
Input Watts (W): 29.853
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291068

CATALOG NUMBER: 14GR-LD5-36-A-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P291068

CATALOG NUMBER: 14GR-LD5-36-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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		86
2	101	94	88	83	99	92	86	82	88	84	80		85	81	78		74
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		64
4	86	75	67	61	84	74	67	61	72	65	60		69	64	59		56
5	80	68	60	54	78	67	59	53	65	58	53		63	57	52		50
6	74	62	54	48	72	61	53	47	59	52	47		58	51	47		44
7	69	57	48	43	67	56	48	43	54	47	42		53	47	42		40
8	65	52	44	38	63	51	44	38	50	43	38		49	43	38		36
9	61	48	40	35	59	47	40	35	46	39	35		45	39	35		33
10	57	44	37	32	56	44	37	32	43	36	32		42	36	32		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3873	3873	3873
5°	3892	3863	3882
10°	3887	3863	3873
15°	3880	3845	3857
20°	3852	3817	3827
25°	3801	3765	3767
30°	3709	3670	3654
35°	3556	3492	3413
40°	3329	3244	2952
45°	3007	2893	2307
50°	2666	2349	1952
55°	2327	1927	1721
60°	2018	1586	1519
65°	1769	1273	1403
70°	1578	1079	1412
75°	1540	1137	1577
80°	1708	1435	1808
85°	1778	1531	2118



TEST NUMBER: P291068

CATALOG NUMBER: 14GR-LD5-36-A-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.6	4.3
10°-20°	391.2	12.5
20°-30°	585.2	18.6
30°-40°	660.6	21.0
40°-50°	560.4	17.8
50°-60°	379.2	12.1
60°-70°	226.3	7.2
70°-80°	141.7	4.5
80°-90°	59.6	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°	1113.0	35.4
0°-40°	1773.6	56.5
0°-60°	2713.3	86.4
0°-90°	3141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1439	1439	1439	1439	1439	
5°	1441	1436	1430	1440	1437	137
15°	1393	1390	1380	1390	1385	393
25°	1280	1276	1268	1274	1269	589
35°	1083	1075	1063	1053	1039	675
45°	790	793	760	652	606	609
55°	496	473	411	368	367	447
65°	278	230	200	213	220	278
75°	148	132	109	144	152	159
85°	58	55	50	64	69	62
90°	0	0	0	0	0	



TEST NUMBER: P291068

CATALOG NUMBER: 14GR-LD5-36-A-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1439.3	1439.3	1439.3	1439.3	1439.3
2.5°	1444.5	1440.1	1433.5	1442.3	1441.5
5°	1440.8	1436.4	1429.9	1440.1	1437.2
7.5°	1434.2	1430.6	1424.0	1433.5	1430.6
10°	1422.6	1419.6	1413.8	1421.8	1417.5
12.5°	1410.2	1408.0	1400.7	1408.0	1403.6
15°	1392.7	1389.7	1380.3	1389.7	1384.6
17.5°	1370.8	1367.1	1359.1	1367.1	1362.7
20°	1345.2	1340.9	1332.8	1340.9	1336.5
22.5°	1314.6	1310.9	1303.7	1310.9	1305.1
25°	1280.3	1275.9	1267.9	1273.7	1268.6
27.5°	1240.9	1235.1	1227.8	1232.2	1229.2
30°	1193.5	1186.2	1181.1	1181.1	1176.0
32.5°	1141.7	1136.6	1127.8	1122.7	1116.2
35°	1082.6	1075.3	1062.9	1053.4	1038.8
37.5°	1019.1	1010.4	995.1	971.0	951.3
40°	947.6	936.7	923.6	876.2	840.4
42.5°	871.0	868.9	846.2	765.3	715.7
45°	790.1	793.0	760.2	651.5	606.2
47.5°	708.4	718.6	658.8	552.2	528.9
50°	636.9	640.5	561.0	479.3	466.2
52.5°	563.2	557.4	478.6	421.7	412.2
55°	496.1	472.7	410.7	367.7	366.9
57.5°	437.0	393.9	350.9	318.8	322.4
60°	375.0	326.8	294.7	277.2	282.3
62.5°	320.3	274.3	245.8	240.7	249.5
65°	277.9	230.5	199.9	213.0	220.3
67.5°	237.8	197.7	162.7	194.1	197.0
70°	200.6	171.4	137.1	178.7	179.5
72.5°	170.0	151.7	118.9	162.0	164.1
75°	148.1	132.0	109.4	144.4	151.7
77.5°	129.9	113.1	101.4	124.7	137.1
80°	110.2	91.2	92.6	104.3	116.7
82.5°	84.6	70.8	73.7	86.1	94.8
85°	57.6	54.7	49.6	64.2	68.6
87.5°	30.6	29.2	25.5	36.5	34.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)