

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: P291069

Luminaire Tested: **14GR-LD5-36-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291069
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-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3391.0 lumens
Efficiency: N/A
Efficacy: 112.9 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

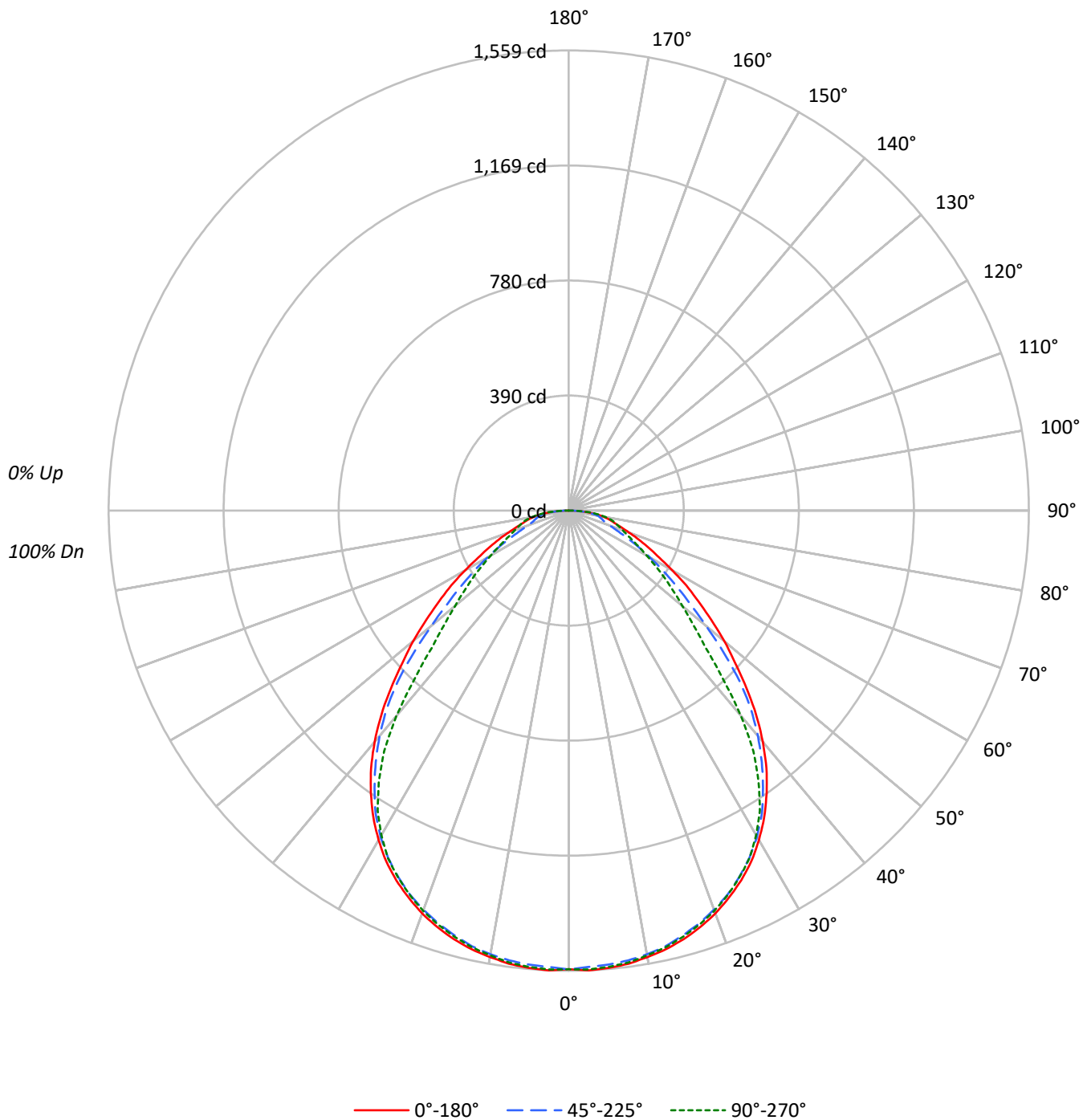
Input Watts (W): 30.039
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4182	4182	4182
5°	4202	4170	4191
10°	4197	4171	4182
15°	4189	4151	4164
20°	4159	4121	4132
25°	4104	4064	4067
30°	4004	3962	3945
35°	3840	3770	3684
40°	3594	3503	3187
45°	3246	3123	2491
50°	2879	2536	2107
55°	2513	2080	1859
60°	2179	1713	1640
65°	1911	1374	1515
70°	1704	1165	1524
75°	1663	1228	1703
80°	1843	1550	1953
85°	1920	1655	2285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	4.3
10°-20°	422.4	12.5
20°-30°	631.8	18.6
30°-40°	713.2	21.0
40°-50°	605.1	17.8
50°-60°	409.4	12.1
60°-70°	244.4	7.2
70°-80°	153.0	4.5
80°-90°	64.4	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°	1201.6	35.4
0°-40°	1914.8	56.5
0°-60°	2929.2	86.4
0°-90°	3391.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3391.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1556	1551	1544	1555	1552	148
15°	1504	1500	1490	1500	1495	424
25°	1382	1378	1369	1375	1370	636
35°	1169	1161	1148	1137	1122	728
45°	853	856	821	703	654	657
55°	536	510	443	397	396	482
65°	300	249	216	230	238	300
75°	160	143	118	156	164	172
85°	62	59	54	69	74	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1559.4	1554.7	1547.6	1557.1	1556.3
5°	1555.5	1550.8	1543.7	1554.7	1551.5
7.5°	1548.4	1544.5	1537.4	1547.6	1544.5
10°	1535.8	1532.6	1526.3	1535.0	1530.3
12.5°	1522.4	1520.0	1512.2	1520.0	1515.3
15°	1503.5	1500.4	1490.1	1500.4	1494.8
17.5°	1479.9	1475.9	1467.3	1475.9	1471.2
20°	1452.3	1447.6	1438.9	1447.6	1442.9
22.5°	1419.2	1415.3	1407.4	1415.3	1409.0
25°	1382.2	1377.5	1368.8	1375.1	1369.6
27.5°	1339.7	1333.4	1325.5	1330.2	1327.1
30°	1288.5	1280.6	1275.1	1275.1	1269.6
32.5°	1232.6	1227.1	1217.6	1212.1	1205.0
35°	1168.8	1160.9	1147.5	1137.3	1121.5
37.5°	1100.3	1090.8	1074.3	1048.3	1027.0
40°	1023.1	1011.3	997.1	945.9	907.3
42.5°	940.4	938.0	913.6	826.2	772.6
45°	853.0	856.1	820.7	703.3	654.5
47.5°	764.7	775.8	711.2	596.2	571.0
50°	687.6	691.5	605.7	517.4	503.3
52.5°	608.0	601.7	516.7	455.2	445.0
55°	535.6	510.4	443.4	396.9	396.2
57.5°	471.8	425.3	378.8	344.2	348.1
60°	404.8	352.8	318.2	299.3	304.8
62.5°	345.8	296.1	265.4	259.9	269.4
65°	300.1	248.9	215.8	230.0	237.9
67.5°	256.8	213.4	175.6	209.5	212.6
70°	216.6	185.1	148.1	193.0	193.7
72.5°	183.5	163.8	128.4	174.8	177.2
75°	159.9	142.6	118.1	155.9	163.8
77.5°	140.2	122.1	109.5	134.7	148.1
80°	118.9	98.4	100.0	112.6	126.0
82.5°	91.4	76.4	79.5	92.9	102.4
85°	62.2	59.1	53.6	69.3	74.0
87.5°	33.1	31.5	27.6	39.4	37.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)