

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: P291070

Luminaire Tested: **14GR-LD5-36-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291070
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-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3451.0 lumens
Efficiency: N/A
Efficacy: 113.1 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

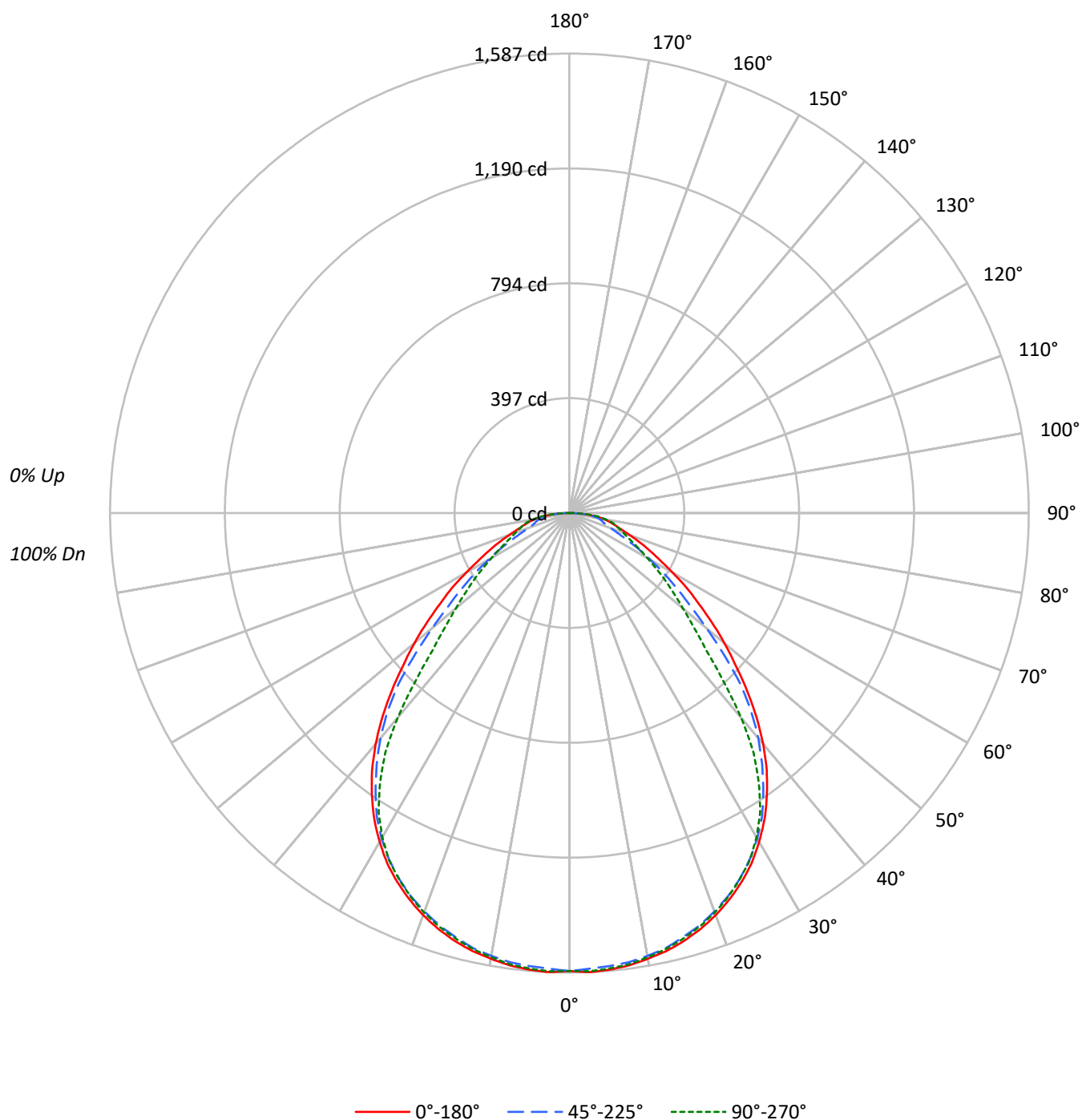
Input Watts (W): 30.504
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4256	4256	4256
5°	4276	4244	4265
10°	4271	4244	4256
15°	4263	4225	4238
20°	4233	4194	4205
25°	4177	4136	4138
30°	4075	4032	4015
35°	3908	3836	3750
40°	3658	3564	3244
45°	3303	3178	2535
50°	2929	2581	2144
55°	2557	2117	1892
60°	2217	1743	1669
65°	1945	1398	1542
70°	1734	1186	1552
75°	1692	1250	1733
80°	1875	1578	1987
85°	1954	1683	2325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	4.3
10°-20°	429.8	12.5
20°-30°	643.0	18.6
30°-40°	725.8	21.0
40°-50°	615.8	17.8
50°-60°	416.6	12.1
60°-70°	248.7	7.2
70°-80°	155.7	4.5
80°-90°	65.5	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°	1222.9	35.4
0°-40°	1948.7	56.5
0°-60°	2981.1	86.4
0°-90°	3451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1581	1581	1581	1581	1581	
5°	1583	1578	1571	1582	1579	150
15°	1530	1527	1516	1527	1521	431
25°	1407	1402	1393	1400	1394	647
35°	1190	1181	1168	1157	1141	741
45°	868	871	835	716	666	669
55°	545	519	451	404	403	491
65°	305	253	220	234	242	305
75°	163	145	120	159	167	175
85°	63	60	54	70	75	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581.4	1581.4	1581.4	1581.4	1581.4
2.5°	1587.0	1582.2	1575.0	1584.6	1583.8
5°	1583.0	1578.2	1571.0	1582.2	1579.0
7.5°	1575.8	1571.8	1564.6	1575.0	1571.8
10°	1563.0	1559.8	1553.3	1562.2	1557.4
12.5°	1549.3	1546.9	1538.9	1546.9	1542.1
15°	1530.1	1526.9	1516.5	1526.9	1521.3
17.5°	1506.1	1502.1	1493.2	1502.1	1497.2
20°	1478.0	1473.2	1464.4	1473.2	1468.4
22.5°	1444.3	1440.3	1432.3	1440.3	1433.9
25°	1406.7	1401.9	1393.0	1399.5	1393.8
27.5°	1363.4	1357.0	1349.0	1353.8	1350.6
30°	1311.3	1303.3	1297.7	1297.7	1292.1
32.5°	1254.4	1248.8	1239.2	1233.5	1226.3
35°	1189.5	1181.4	1167.8	1157.4	1141.4
37.5°	1119.7	1110.1	1093.3	1066.8	1045.2
40°	1041.2	1029.2	1014.7	962.6	923.4
42.5°	957.0	954.6	929.8	840.8	786.3
45°	868.0	871.3	835.2	715.8	666.1
47.5°	778.3	789.5	723.8	606.8	581.1
50°	699.7	703.7	616.4	526.6	512.2
52.5°	618.8	612.4	525.8	463.3	452.9
55°	545.0	519.4	451.3	404.0	403.2
57.5°	480.1	432.8	385.5	350.3	354.3
60°	412.0	359.1	323.8	304.6	310.2
62.5°	351.9	301.4	270.1	264.5	274.1
65°	305.4	253.3	219.6	234.0	242.1
67.5°	261.3	217.2	178.7	213.2	216.4
70°	220.4	188.4	150.7	196.4	197.2
72.5°	186.8	166.7	130.6	177.9	180.3
75°	162.7	145.1	120.2	158.7	166.7
77.5°	142.7	124.2	111.4	137.1	150.7
80°	121.0	100.2	101.8	114.6	128.2
82.5°	93.0	77.7	81.0	94.6	104.2
85°	63.3	60.1	54.5	70.5	75.3
87.5°	33.7	32.1	28.1	40.1	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)