

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: P290631

Luminaire Tested: **14GR-LD5-36-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-F1-UNV-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3648.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

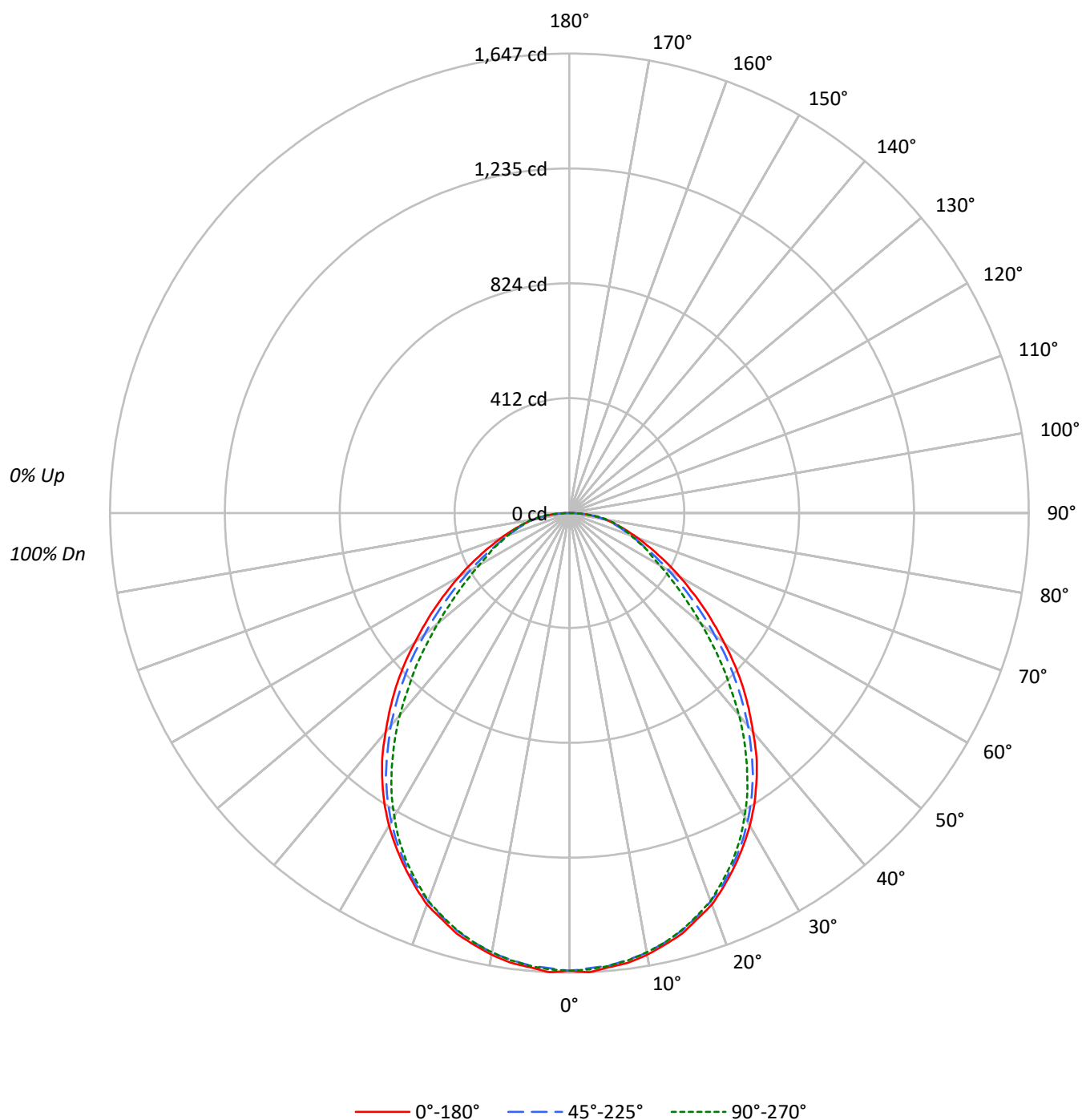
Input Watts (W): 29.667
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4415	4415	4415
5°	4414	4398	4400
10°	4392	4371	4369
15°	4347	4321	4314
20°	4277	4241	4236
25°	4154	4126	4097
30°	4020	3970	3903
35°	3843	3769	3645
40°	3598	3498	3325
45°	3341	3192	2960
50°	3031	2843	2576
55°	2742	2511	2252
60°	2462	2201	2007
65°	2209	1965	1922
70°	2039	1829	1849
75°	1947	1834	1939
80°	1970	1957	2112
85°	2041	2013	2245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.9	4.2
10°-20°	437.8	12.0
20°-30°	639.4	17.5
30°-40°	712.5	19.5
40°-50°	642.0	17.6
50°-60°	479.9	13.2
60°-70°	316.6	8.7
70°-80°	193.2	5.3
80°-90°	71.7	2.0
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°	1232.1	33.8
0°-40°	1944.6	53.3
0°-60°	3066.5	84.1
0°-90°	3648.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3648.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1641	1641	1641	1641	1641	
5°	1634	1632	1628	1636	1629	155
15°	1560	1554	1551	1560	1549	439
25°	1399	1394	1390	1392	1380	644
35°	1170	1160	1147	1127	1110	729
45°	878	869	839	800	778	676
55°	584	575	535	491	480	523
65°	347	336	309	296	302	348
75°	187	184	176	182	186	200
85°	66	64	65	72	73	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1640.6	1640.6	1640.6	1640.6	1640.6
2.5°	1647.3	1639.8	1633.1	1643.1	1637.3
5°	1633.9	1632.2	1628.1	1636.4	1628.9
7.5°	1625.5	1619.7	1614.7	1624.7	1616.3
10°	1607.2	1603.8	1599.6	1608.0	1598.8
12.5°	1584.6	1581.2	1577.0	1587.1	1577.0
15°	1560.3	1554.5	1551.1	1560.3	1548.6
17.5°	1525.2	1522.7	1517.7	1526.9	1515.2
20°	1493.4	1484.2	1480.9	1487.6	1479.2
22.5°	1447.4	1440.7	1439.9	1444.1	1429.9
25°	1398.9	1393.9	1389.7	1392.3	1379.7
27.5°	1347.9	1341.2	1336.2	1335.4	1322.0
30°	1293.6	1285.2	1277.7	1271.0	1256.0
32.5°	1234.2	1224.2	1214.1	1203.3	1187.4
35°	1169.8	1159.8	1147.2	1127.2	1109.6
37.5°	1102.1	1090.4	1070.3	1046.9	1029.3
40°	1024.3	1018.5	995.9	965.8	946.6
42.5°	951.6	944.9	916.5	883.0	857.1
45°	878.0	868.8	838.7	800.2	777.7
47.5°	802.7	793.5	760.1	712.4	692.4
50°	724.1	719.1	679.0	635.5	615.4
52.5°	652.2	646.4	605.4	561.9	543.5
55°	584.5	575.3	535.2	490.8	480.0
57.5°	516.8	506.7	469.1	431.5	423.9
60°	457.4	444.9	408.9	379.6	372.9
62.5°	401.4	387.2	357.1	334.5	331.1
65°	347.0	336.1	308.6	296.0	301.9
67.5°	300.2	289.3	269.3	264.2	262.6
70°	259.2	249.2	232.5	234.1	235.0
72.5°	221.6	215.7	203.2	207.4	210.7
75°	187.3	184.0	176.4	182.3	186.5
77.5°	156.4	153.9	150.5	155.5	162.2
80°	127.1	125.4	126.3	129.6	136.3
82.5°	97.8	94.5	97.0	103.7	107.9
85°	66.1	63.6	65.2	71.9	72.7
87.5°	30.9	30.9	30.1	35.1	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)