

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: P290675

Luminaire Tested: **14GR-LD5-36-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290675
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-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2844.0 lumens
Efficiency: N/A
Efficacy: 95.0 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

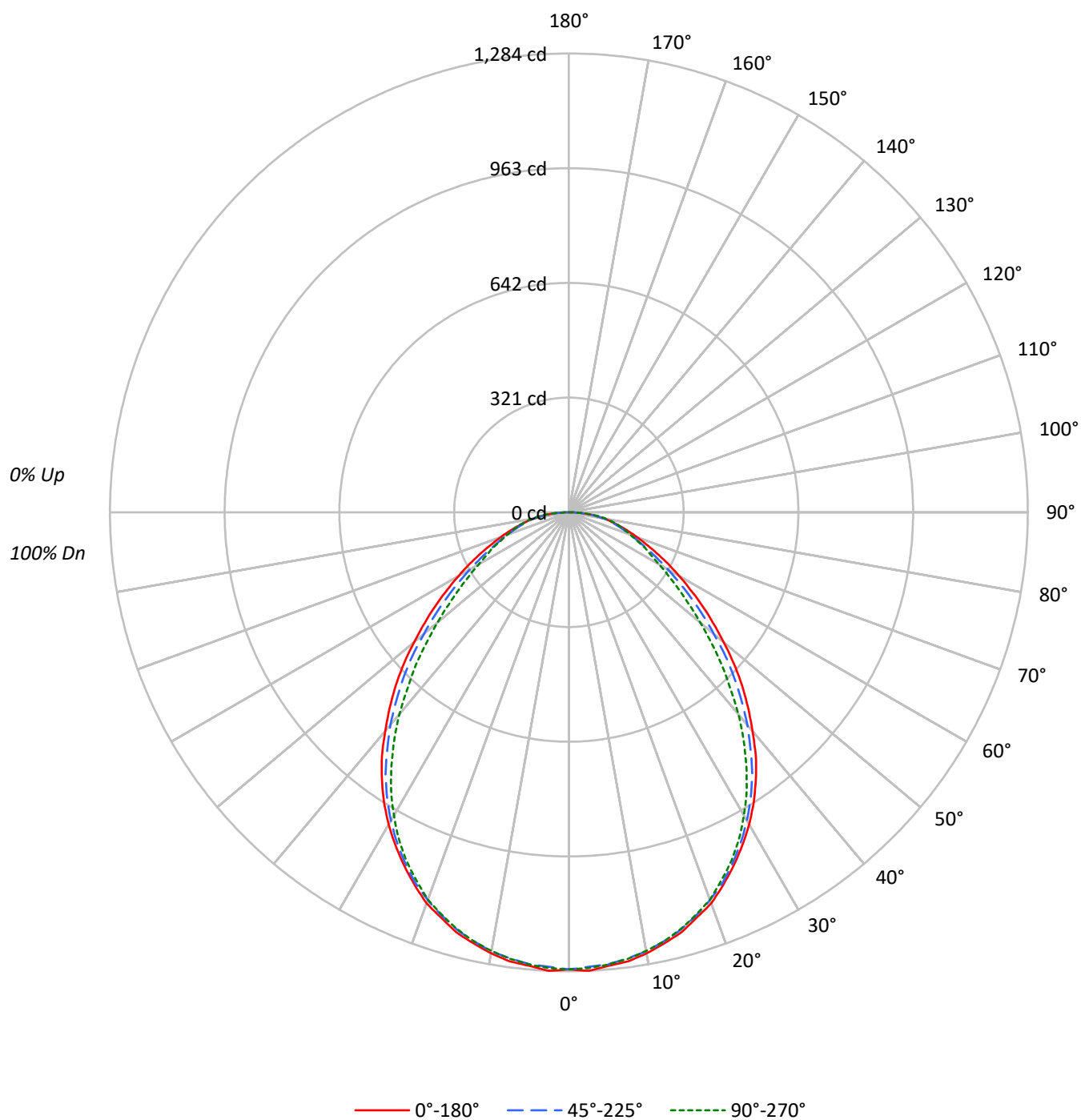
Input Watts (W): 29.946
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3442	3442	3442
5°	3441	3428	3430
10°	3424	3408	3406
15°	3389	3369	3363
20°	3334	3306	3302
25°	3238	3217	3194
30°	3134	3095	3042
35°	2996	2938	2842
40°	2805	2727	2592
45°	2605	2488	2307
50°	2363	2216	2009
55°	2138	1957	1756
60°	1919	1716	1565
65°	1722	1531	1498
70°	1590	1426	1441
75°	1518	1430	1512
80°	1536	1525	1647
85°	1590	1568	1751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	4.2
10°-20°	341.3	12.0
20°-30°	498.5	17.5
30°-40°	555.5	19.5
40°-50°	500.5	17.6
50°-60°	374.1	13.2
60°-70°	246.8	8.7
70°-80°	150.6	5.3
80°-90°	55.9	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°	960.6	33.8
0°-40°	1516.1	53.3
0°-60°	2390.7	84.1
0°-90°	2844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1279	1279	1279	1279	1279	
5°	1274	1272	1269	1276	1270	121
15°	1216	1212	1209	1216	1207	342
25°	1091	1087	1084	1085	1076	502
35°	912	904	894	879	865	569
45°	684	677	654	624	606	527
55°	456	448	417	383	374	408
65°	270	262	240	231	235	271
75°	146	143	138	142	145	156
85°	52	50	51	56	57	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1279.0	1279.0	1279.0	1279.0	1279.0
2.5°	1284.2	1278.4	1273.2	1281.0	1276.4
5°	1273.8	1272.5	1269.2	1275.8	1269.9
7.5°	1267.3	1262.7	1258.8	1266.6	1260.1
10°	1252.9	1250.3	1247.1	1253.6	1246.4
12.5°	1235.3	1232.7	1229.5	1237.3	1229.5
15°	1216.4	1211.9	1209.3	1216.4	1207.3
17.5°	1189.1	1187.1	1183.2	1190.4	1181.2
20°	1164.3	1157.1	1154.5	1159.7	1153.2
22.5°	1128.4	1123.2	1122.6	1125.8	1114.7
25°	1090.6	1086.7	1083.5	1085.4	1075.6
27.5°	1050.9	1045.6	1041.7	1041.1	1030.6
30°	1008.5	1002.0	996.1	990.9	979.1
32.5°	962.2	954.4	946.6	938.1	925.7
35°	912.0	904.2	894.4	878.8	865.1
37.5°	859.2	850.1	834.4	816.2	802.5
40°	798.6	794.0	776.4	752.9	737.9
42.5°	741.9	736.6	714.5	688.4	668.2
45°	684.5	677.3	653.9	623.9	606.3
47.5°	625.8	618.6	592.6	555.4	539.8
50°	564.5	560.6	529.3	495.4	479.8
52.5°	508.5	503.9	472.0	438.1	423.7
55°	455.7	448.5	417.2	382.7	374.2
57.5°	402.9	395.0	365.7	336.4	330.5
60°	356.6	346.8	318.8	296.0	290.7
62.5°	312.9	301.8	278.4	260.8	258.2
65°	270.5	262.1	240.5	230.8	235.3
67.5°	234.0	225.6	209.9	206.0	204.7
70°	202.1	194.3	181.2	182.5	183.2
72.5°	172.8	168.2	158.4	161.7	164.3
75°	146.0	143.4	137.5	142.1	145.4
77.5°	121.9	119.9	117.3	121.3	126.5
80°	99.1	97.8	98.4	101.0	106.3
82.5°	76.3	73.7	75.6	80.8	84.1
85°	51.5	49.5	50.8	56.1	56.7
87.5°	24.1	24.1	23.5	27.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)