

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: P290655

Luminaire Tested: **14GR-LD5-20-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290655
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-LD5-20-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: 1603.0 lumens
Efficiency: N/A
Efficacy: 100.8 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

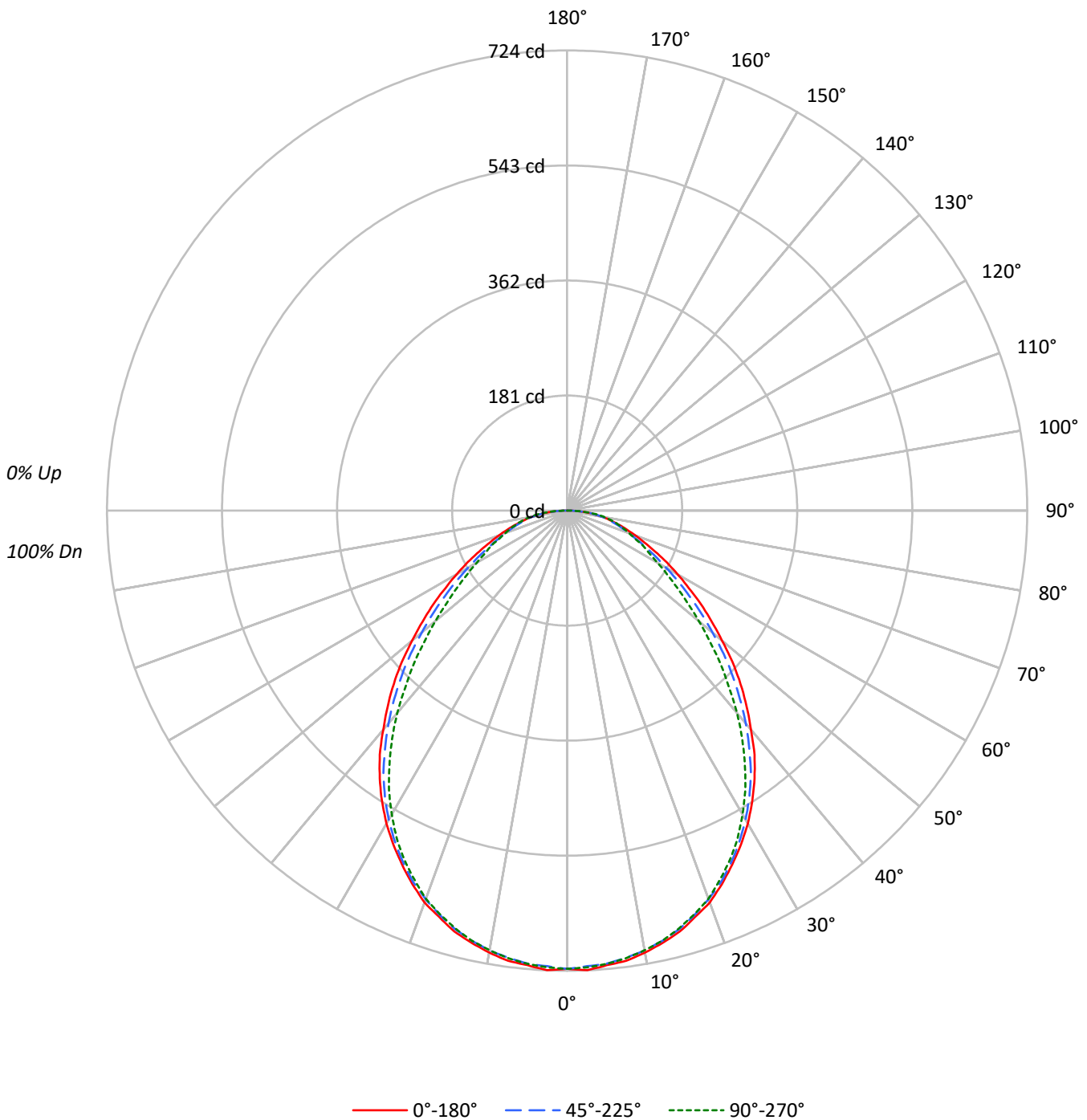
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1940	1940	1940
5°	1940	1932	1934
10°	1930	1921	1920
15°	1910	1899	1896
20°	1879	1863	1861
25°	1825	1813	1800
30°	1766	1744	1715
35°	1689	1656	1602
40°	1581	1537	1461
45°	1468	1402	1300
50°	1332	1249	1132
55°	1205	1103	989
60°	1082	967	882
65°	971	863	844
70°	896	803	812
75°	856	806	852
80°	866	860	928
85°	895	886	988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	4.2
10°-20°	192.4	12.0
20°-30°	281.0	17.5
30°-40°	313.1	19.5
40°-50°	282.1	17.6
50°-60°	210.9	13.2
60°-70°	139.1	8.7
70°-80°	84.9	5.3
80°-90°	31.5	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°	541.4	33.8
0°-40°	854.5	53.3
0°-60°	1347.5	84.1
0°-90°	1603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	718	717	715	719	716	68
15°	686	683	682	686	680	193
25°	615	612	611	612	606	283
35°	514	510	504	495	488	320
45°	386	382	368	352	342	297
55°	257	253	235	216	211	230
65°	152	148	136	130	133	153
75°	82	81	78	80	82	88
85°	29	28	29	32	32	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.9	720.9	720.9	720.9	720.9
2.5°	723.8	720.5	717.6	722.0	719.4
5°	718.0	717.2	715.4	719.1	715.8
7.5°	714.3	711.7	709.5	713.9	710.3
10°	706.2	704.7	702.9	706.6	702.5
12.5°	696.3	694.8	693.0	697.4	693.0
15°	685.6	683.1	681.6	685.6	680.5
17.5°	670.2	669.1	666.9	670.9	665.8
20°	656.2	652.2	650.7	653.7	650.0
22.5°	636.0	633.1	632.7	634.6	628.3
25°	614.7	612.5	610.7	611.8	606.3
27.5°	592.3	589.4	587.2	586.8	580.9
30°	568.4	564.7	561.4	558.5	551.9
32.5°	542.3	537.9	533.5	528.7	521.8
35°	514.0	509.6	504.1	495.3	487.6
37.5°	484.3	479.1	470.3	460.0	452.3
40°	450.1	447.5	437.6	424.4	415.9
42.5°	418.1	415.2	402.7	388.0	376.6
45°	385.8	381.8	368.5	351.6	341.7
47.5°	352.7	348.7	334.0	313.1	304.2
50°	318.2	316.0	298.4	279.3	270.4
52.5°	286.6	284.0	266.0	246.9	238.8
55°	256.8	252.8	235.2	215.7	210.9
57.5°	227.1	222.7	206.1	189.6	186.3
60°	201.0	195.5	179.7	166.8	163.9
62.5°	176.4	170.1	156.9	147.0	145.5
65°	152.5	147.7	135.6	130.1	132.6
67.5°	131.9	127.1	118.3	116.1	115.4
70°	113.9	109.5	102.1	102.9	103.2
72.5°	97.4	94.8	89.3	91.1	92.6
75°	82.3	80.8	77.5	80.1	81.9
77.5°	68.7	67.6	66.1	68.3	71.3
80°	55.9	55.1	55.5	57.0	59.9
82.5°	43.0	41.5	42.6	45.6	47.4
85°	29.0	27.9	28.7	31.6	32.0
87.5°	13.6	13.6	13.2	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)