

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: P290599

Luminaire Tested: **14GR-LD5-20-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290599
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-L82765-W2A1-U-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2149.0 lumens
Efficiency: N/A
Efficacy: 134.3 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

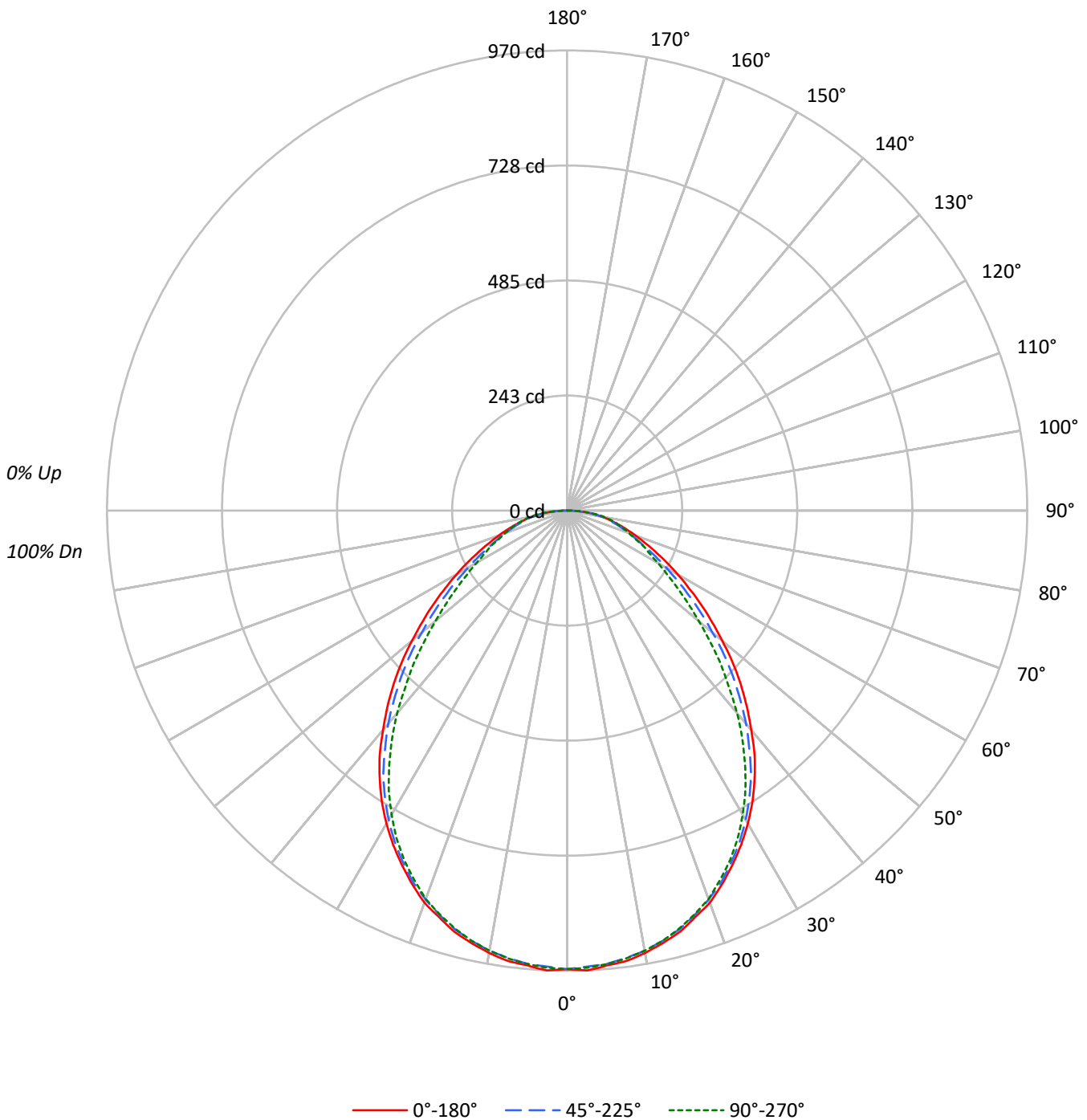
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2601	2601	2601
5°	2600	2591	2592
10°	2587	2575	2573
15°	2561	2546	2542
20°	2519	2498	2495
25°	2447	2431	2413
30°	2368	2339	2299
35°	2264	2220	2147
40°	2120	2061	1959
45°	1968	1880	1743
50°	1786	1675	1518
55°	1615	1479	1326
60°	1450	1297	1182
65°	1301	1158	1132
70°	1201	1077	1089
75°	1147	1080	1142
80°	1161	1153	1244
85°	1201	1186	1325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	4.2
10°-20°	257.9	12.0
20°-30°	376.7	17.5
30°-40°	419.7	19.5
40°-50°	378.2	17.6
50°-60°	282.7	13.2
60°-70°	186.5	8.7
70°-80°	113.8	5.3
80°-90°	42.2	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°	725.8	33.8
0°-40°	1145.6	53.3
0°-60°	1806.5	84.1
0°-90°	2149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	962	962	959	964	960	91
15°	919	916	914	919	912	259
25°	824	821	819	820	813	379
35°	689	683	676	664	654	430
45°	517	512	494	471	458	398
55°	344	339	315	289	283	308
65°	204	198	182	174	178	205
75°	110	108	104	107	110	118
85°	39	37	38	42	43	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.5	966.5	966.5	966.5	966.5
2.5°	970.4	966.0	962.0	967.9	964.5
5°	962.5	961.5	959.1	964.0	959.6
7.5°	957.6	954.1	951.2	957.1	952.2
10°	946.8	944.8	942.3	947.2	941.8
12.5°	933.5	931.5	929.0	934.9	929.0
15°	919.2	915.7	913.8	919.2	912.3
17.5°	898.5	897.0	894.0	899.5	892.6
20°	879.8	874.3	872.4	876.3	871.4
22.5°	852.7	848.7	848.2	850.7	842.3
25°	824.1	821.1	818.7	820.2	812.8
27.5°	794.1	790.1	787.2	786.7	778.8
30°	762.0	757.1	752.7	748.7	739.9
32.5°	727.1	721.2	715.2	708.8	699.5
35°	689.1	683.2	675.8	664.0	653.7
37.5°	649.2	642.3	630.5	616.7	606.4
40°	603.4	600.0	586.7	568.9	557.6
42.5°	560.6	556.6	539.9	520.2	504.9
45°	517.2	511.8	494.1	471.4	458.1
47.5°	472.9	467.5	447.8	419.7	407.9
50°	426.6	423.6	400.0	374.4	362.5
52.5°	384.2	380.8	356.6	331.0	320.2
55°	344.3	338.9	315.3	289.1	282.7
57.5°	304.4	298.5	276.3	254.2	249.7
60°	269.4	262.1	240.9	223.6	219.7
62.5°	236.4	228.1	210.3	197.0	195.1
65°	204.4	198.0	181.8	174.4	177.8
67.5°	176.8	170.4	158.6	155.7	154.7
70°	152.7	146.8	136.9	137.9	138.4
72.5°	130.5	127.1	119.7	122.2	124.1
75°	110.3	108.4	103.9	107.4	109.8
77.5°	92.1	90.6	88.7	91.6	95.6
80°	74.9	73.9	74.4	76.4	80.3
82.5°	57.6	55.7	57.1	61.1	63.5
85°	38.9	37.4	38.4	42.4	42.9
87.5°	18.2	18.2	17.7	20.7	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)