

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: P291442

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-20-A19/156-UNV-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1872.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

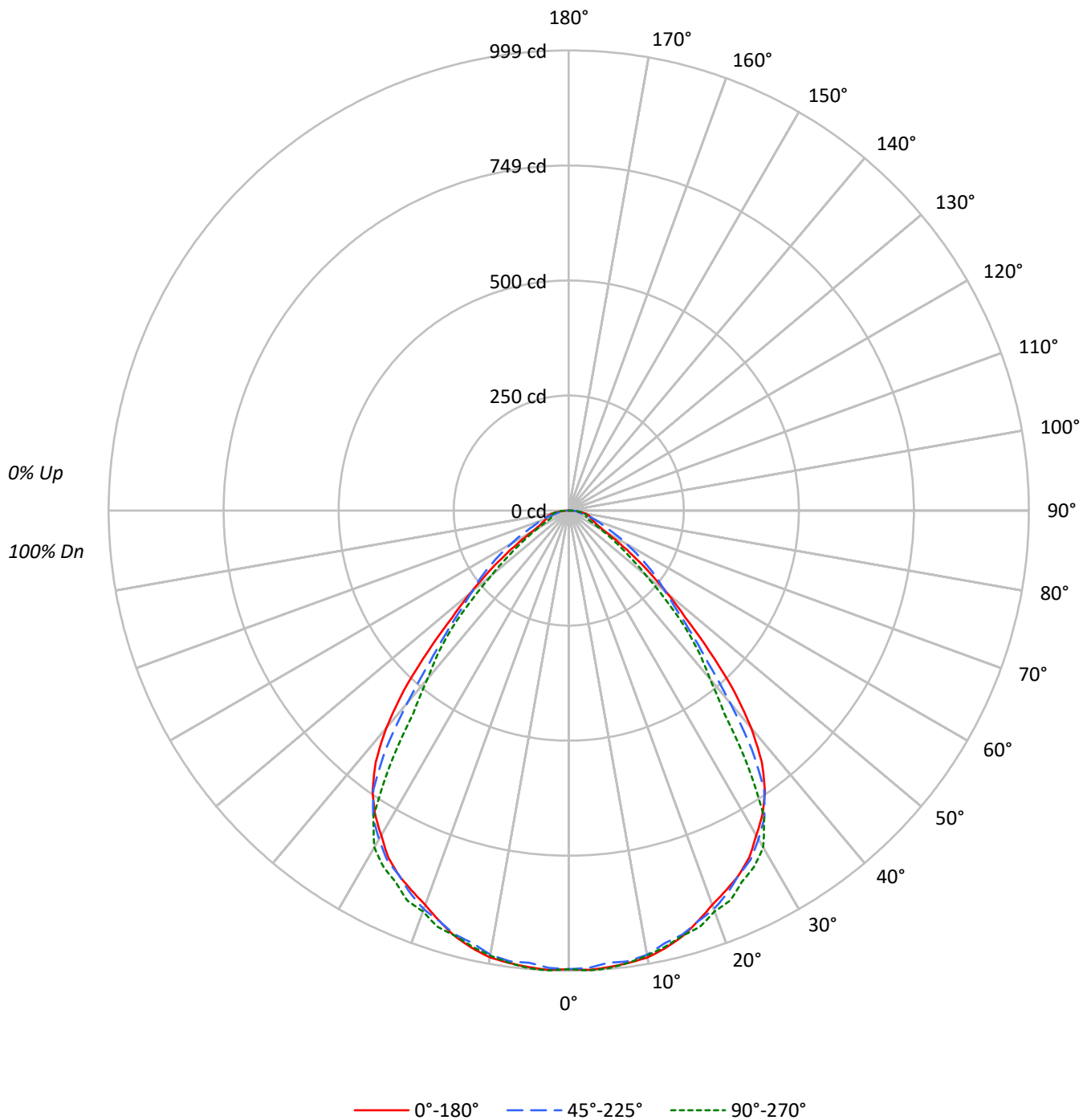
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2679	2679	2679
5°	2688	2662	2694
10°	2692	2676	2680
15°	2665	2655	2661
20°	2609	2637	2652
25°	2593	2592	2641
30°	2530	2560	2623
35°	2439	2430	2233
40°	2166	1912	1674
45°	1644	1430	1354
50°	1166	1145	919
55°	798	977	631
60°	494	779	422
65°	406	600	306
70°	404	522	314
75°	486	374	419
80°	558	346	525
85°	528	608	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	5.0
10°-20°	269.6	14.4
20°-30°	405.4	21.7
30°-40°	442.0	23.6
40°-50°	309.5	16.5
50°-60°	175.2	9.4
60°-70°	95.9	5.1
70°-80°	58.1	3.1
80°-90°	22.0	1.2
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°	769.4	41.1
0°-40°	1211.4	64.7
0°-60°	1696.0	90.6
0°-90°	1872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	995	993	986	997	997	95
15°	956	954	953	967	955	269
25°	873	875	873	893	890	401
35°	743	739	740	702	680	458
45°	432	451	376	371	356	335
55°	170	204	208	206	135	156
65°	64	105	94	119	48	66
75°	47	67	36	71	40	48
85°	17	28	20	24	19	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.5	995.5	995.5	995.5	995.5
2.5°	998.0	996.7	993.7	999.7	999.3
5°	995.0	993.3	985.6	997.2	997.2
7.5°	990.7	986.5	986.9	993.3	990.3
10°	985.2	977.9	979.2	980.9	980.9
12.5°	972.3	965.5	962.0	967.6	969.3
15°	956.5	953.9	953.0	966.7	955.2
17.5°	934.2	939.7	934.6	945.7	947.5
20°	911.0	921.8	920.9	928.6	926.0
22.5°	892.2	899.0	899.0	908.5	916.2
25°	873.3	875.0	872.9	893.0	889.6
27.5°	848.9	847.6	854.5	864.8	871.6
30°	814.2	814.6	824.0	837.8	844.2
32.5°	782.5	778.6	790.2	796.2	789.3
35°	742.6	739.2	739.6	701.9	679.6
37.5°	688.2	691.2	651.8	582.8	553.7
40°	616.6	622.6	544.2	492.8	476.5
42.5°	530.1	531.8	446.1	429.4	418.7
45°	432.0	450.8	375.8	371.1	355.7
47.5°	342.4	377.5	315.0	318.0	281.1
50°	278.5	313.7	273.4	274.7	219.4
52.5°	220.3	254.5	241.3	237.4	172.3
55°	170.1	203.5	208.3	206.5	134.6
57.5°	125.1	161.1	174.8	181.3	103.7
60°	91.7	131.6	144.8	157.7	78.4
62.5°	72.8	114.0	118.7	137.6	60.9
65°	63.8	105.0	94.3	119.1	48.0
67.5°	57.0	99.8	76.7	105.4	42.0
70°	51.4	90.0	66.4	94.3	39.9
72.5°	51.4	78.8	52.3	83.6	40.3
75°	46.7	67.3	36.0	70.7	40.3
77.5°	41.6	57.4	27.0	57.4	37.7
80°	36.0	45.0	22.3	44.1	33.9
82.5°	26.6	33.9	19.3	33.0	27.4
85°	17.1	27.9	19.7	24.0	19.3
87.5°	8.1	14.1	12.4	12.0	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)