

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: P291479

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291479
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-L92765-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1852.0 lumens
Efficiency: N/A
Efficacy: 116.5 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

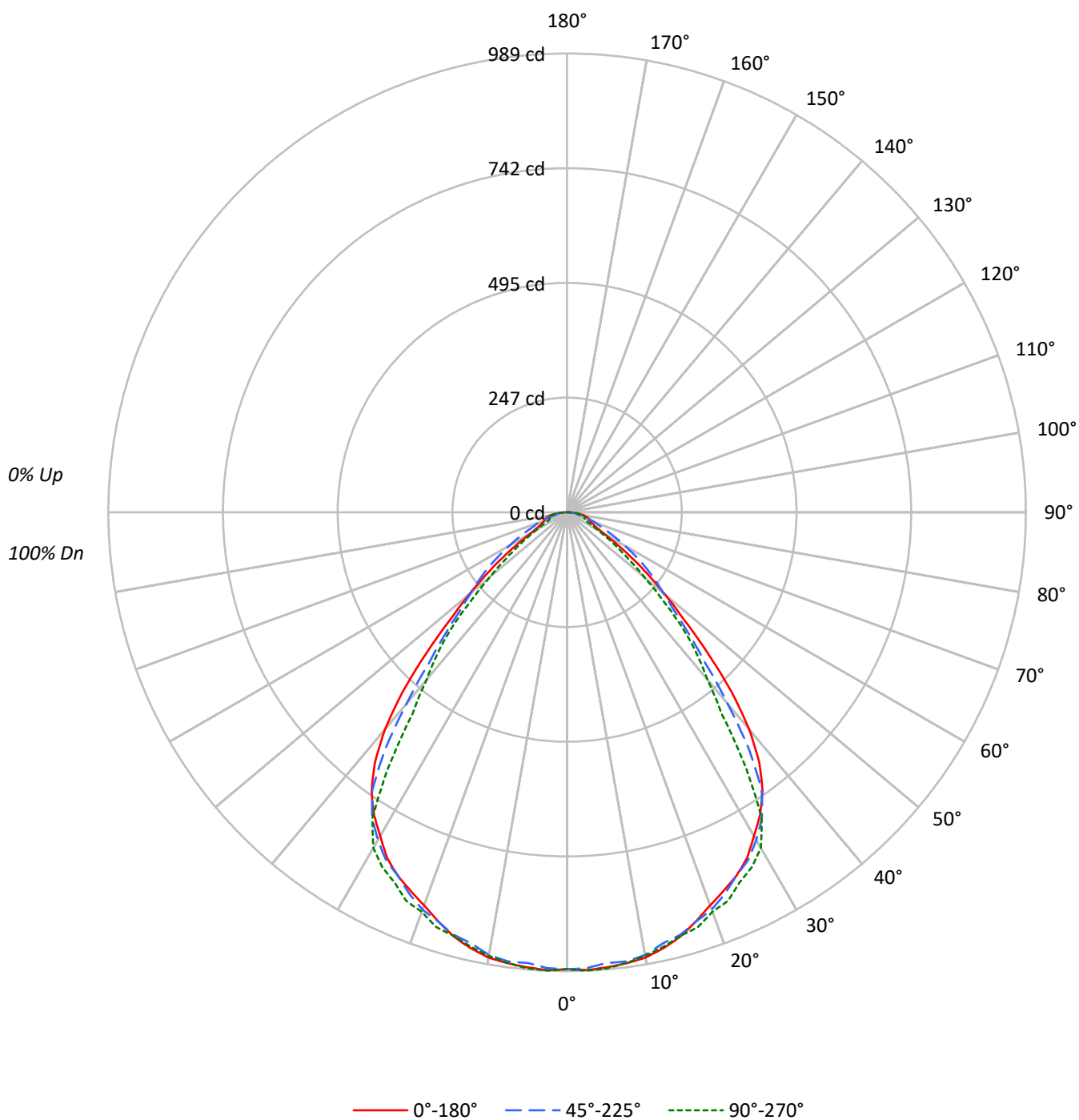
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2650	2650	2650
5°	2659	2634	2665
10°	2663	2647	2652
15°	2636	2627	2633
20°	2581	2609	2623
25°	2565	2564	2613
30°	2503	2533	2595
35°	2414	2404	2209
40°	2143	1891	1656
45°	1626	1415	1339
50°	1154	1132	909
55°	790	966	624
60°	488	771	418
65°	402	594	302
70°	400	517	310
75°	480	370	415
80°	552	341	519
85°	525	602	590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.4	5.0
10°-20°	266.7	14.4
20°-30°	401.1	21.7
30°-40°	437.2	23.6
40°-50°	306.2	16.5
50°-60°	173.3	9.4
60°-70°	94.8	5.1
70°-80°	57.5	3.1
80°-90°	21.8	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°	761.2	41.1
0°-40°	1198.4	64.7
0°-60°	1677.9	90.6
0°-90°	1852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	985	985	985	985	985	
5°	984	983	975	986	986	94
15°	946	944	943	956	945	266
25°	864	866	864	884	880	397
35°	735	731	732	694	672	453
45°	427	446	372	367	352	332
55°	168	201	206	204	133	154
65°	63	104	93	118	48	65
75°	46	67	36	70	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°	984.8	984.8	984.8	984.8	984.8
2.5°	987.4	986.1	983.1	989.1	988.6
5°	984.4	982.7	975.1	986.5	986.5
7.5°	980.2	975.9	976.3	982.7	979.7
10°	974.6	967.4	968.7	970.4	970.4
12.5°	961.9	955.1	951.8	957.3	959.0
15°	946.2	943.7	942.9	956.4	945.0
17.5°	924.2	929.7	924.6	935.6	937.3
20°	901.3	911.9	911.1	918.7	916.1
22.5°	882.7	889.4	889.4	898.8	906.4
25°	864.0	865.7	863.6	883.5	880.1
27.5°	839.8	838.6	845.3	855.5	862.3
30°	805.5	805.9	815.2	828.8	835.2
32.5°	774.1	770.3	781.8	787.7	780.9
35°	734.7	731.3	731.7	694.4	672.4
37.5°	680.9	683.8	644.8	576.6	547.7
40°	610.1	616.0	538.4	487.5	471.4
42.5°	524.4	526.1	441.3	424.8	414.2
45°	427.3	446.0	371.8	367.1	351.9
47.5°	338.7	373.5	311.6	314.6	278.1
50°	275.6	310.3	270.5	271.7	217.1
52.5°	217.9	251.8	238.7	234.9	170.4
55°	168.3	201.4	206.0	204.3	133.1
57.5°	123.8	159.4	173.0	179.3	102.6
60°	90.7	130.2	143.3	156.0	77.6
62.5°	72.1	112.8	117.4	136.1	60.2
65°	63.2	103.9	93.3	117.9	47.5
67.5°	56.4	98.8	75.9	104.3	41.5
70°	50.9	89.0	65.7	93.3	39.4
72.5°	50.9	78.0	51.7	82.7	39.9
75°	46.2	66.6	35.6	70.0	39.9
77.5°	41.1	56.8	26.7	56.8	37.3
80°	35.6	44.5	22.0	43.7	33.5
82.5°	26.3	33.5	19.1	32.6	27.1
85°	17.0	27.6	19.5	23.7	19.1
87.5°	8.1	14.0	12.3	11.9	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)