

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: P291376

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291376
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-L82765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1839.0 lumens
Efficiency: N/A
Efficacy: 118.4 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

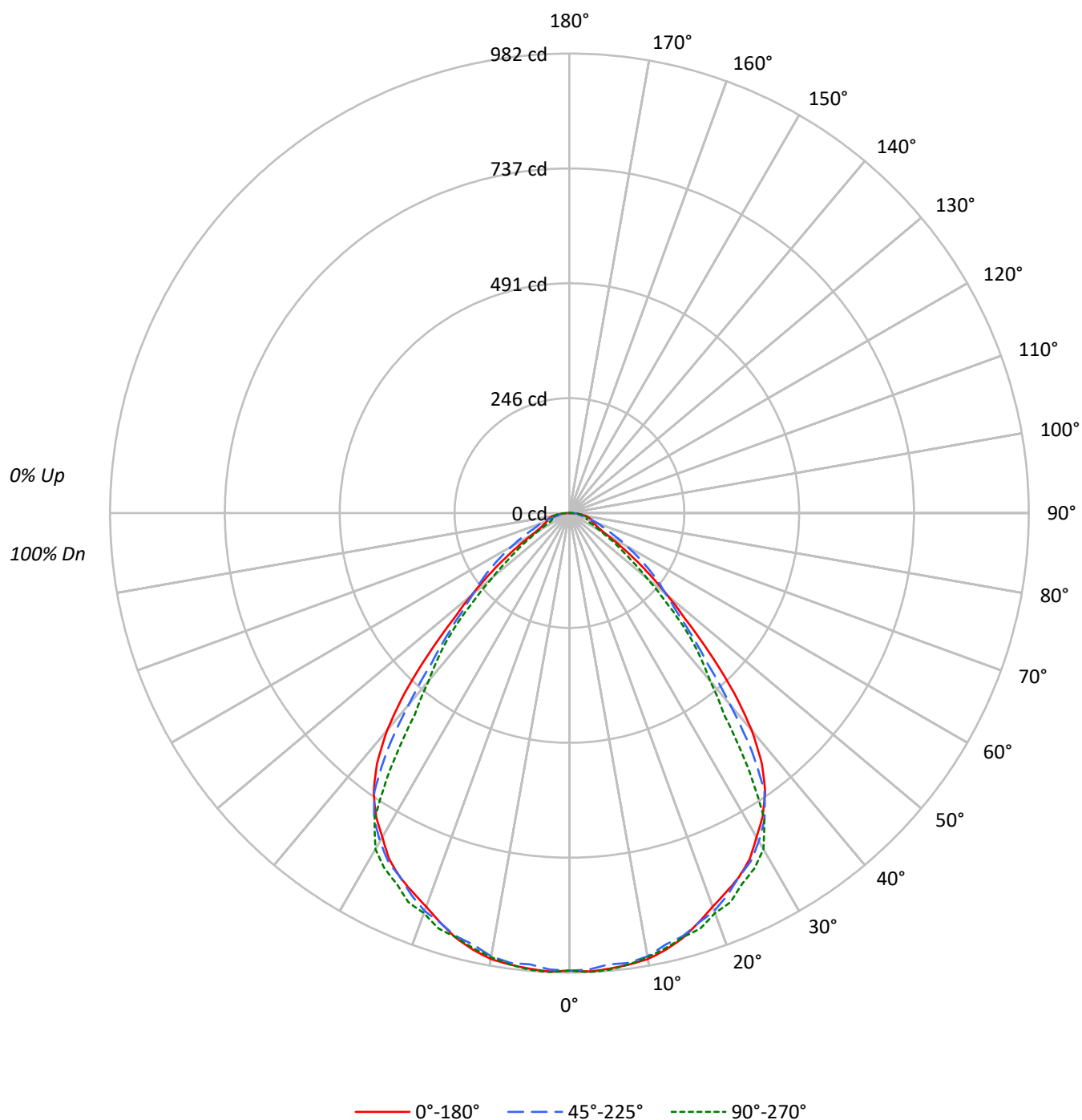
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	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		100
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93		88
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81		77
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71		68
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63		61
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57		54
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51		49
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46		44
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42		40
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38		37
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35		34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2632	2632	2632
5°	2640	2615	2646
10°	2645	2628	2633
15°	2618	2608	2614
20°	2563	2591	2605
25°	2547	2546	2595
30°	2485	2515	2577
35°	2396	2387	2193
40°	2128	1878	1644
45°	1615	1405	1330
50°	1145	1124	902
55°	784	960	620
60°	485	766	414
65°	399	590	300
70°	397	514	308
75°	477	368	412
80°	549	339	516
85°	519	599	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	5.0
10°-20°	264.8	14.4
20°-30°	398.3	21.7
30°-40°	434.2	23.6
40°-50°	304.0	16.5
50°-60°	172.1	9.4
60°-70°	94.2	5.1
70°-80°	57.1	3.1
80°-90°	21.6	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°	755.9	41.1
0°-40°	1190.0	64.7
0°-60°	1666.1	90.6
0°-90°	1839.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	978	976	968	980	980	93
15°	940	937	936	950	938	264
25°	858	860	858	877	874	394
35°	730	726	727	690	668	450
45°	424	443	369	365	349	330
55°	167	200	205	203	132	153
65°	63	103	93	117	47	64
75°	46	66	35	70	40	48
85°	17	27	19	24	19	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	977.9	977.9	977.9	977.9	977.9
2.5°	980.4	979.2	976.2	982.1	981.7
5°	977.5	975.8	968.2	979.6	979.6
7.5°	973.3	969.1	969.5	975.8	972.9
10°	967.8	960.6	961.9	963.6	963.6
12.5°	955.2	948.4	945.1	950.5	952.2
15°	939.6	937.1	936.2	949.7	938.3
17.5°	917.7	923.2	918.1	929.1	930.8
20°	895.0	905.5	904.7	912.2	909.7
22.5°	876.5	883.2	883.2	892.5	900.0
25°	857.9	859.6	857.5	877.3	873.9
27.5°	833.9	832.7	839.4	849.5	856.2
30°	799.8	800.3	809.5	823.0	829.3
32.5°	768.7	764.9	776.3	782.2	775.4
35°	729.5	726.2	726.6	689.5	667.7
37.5°	676.1	679.0	640.3	572.5	543.9
40°	605.8	611.7	534.6	484.1	468.1
42.5°	520.7	522.4	438.2	421.8	411.3
45°	424.3	442.9	369.2	364.6	349.4
47.5°	336.4	370.9	309.4	312.4	276.2
50°	273.6	308.1	268.6	269.8	215.5
52.5°	216.4	250.1	237.0	233.2	169.2
55°	167.1	200.0	204.6	202.9	132.2
57.5°	122.9	158.3	171.8	178.1	101.9
60°	90.1	129.2	142.3	154.9	77.0
62.5°	71.6	112.0	116.6	135.1	59.8
65°	62.7	103.1	92.6	117.0	47.1
67.5°	56.0	98.1	75.4	103.6	41.3
70°	50.5	88.4	65.3	92.6	39.2
72.5°	50.5	77.5	51.4	82.1	39.6
75°	45.9	66.1	35.4	69.5	39.6
77.5°	40.8	56.4	26.5	56.4	37.0
80°	35.4	44.2	21.9	43.4	33.3
82.5°	26.1	33.3	18.9	32.4	26.9
85°	16.8	27.4	19.4	23.6	18.9
87.5°	8.0	13.9	12.2	11.8	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)