

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: P291478

Luminaire Tested: **14GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291478
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-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: 1816.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

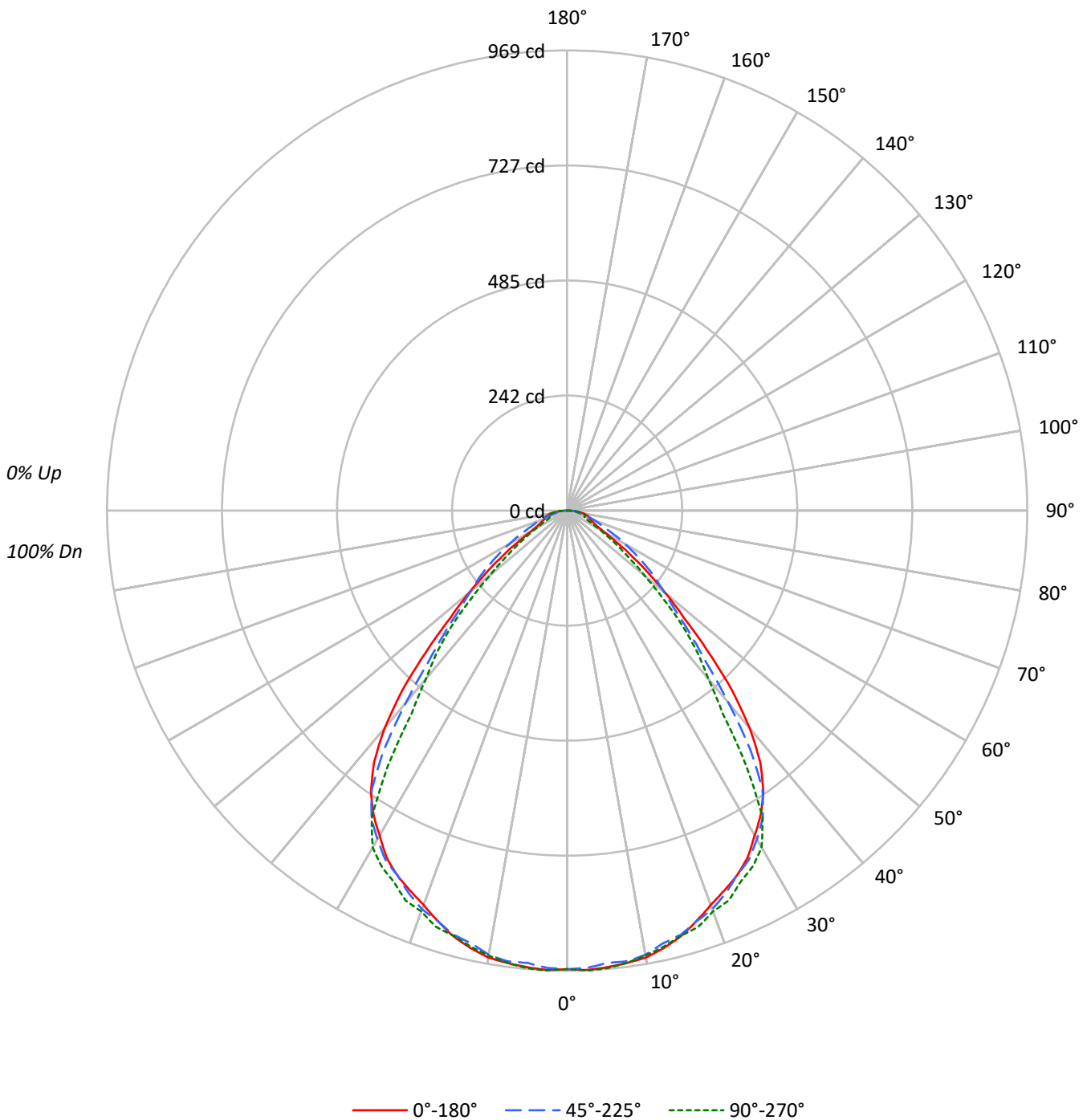
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55	50	46	44
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48	42	38	37
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2599	2599	2599
5°	2608	2583	2613
10°	2611	2596	2600
15°	2585	2576	2581
20°	2531	2558	2572
25°	2515	2514	2562
30°	2454	2484	2545
35°	2367	2357	2166
40°	2101	1854	1624
45°	1595	1388	1313
50°	1131	1110	891
55°	774	948	612
60°	479	756	410
65°	394	583	297
70°	393	507	304
75°	471	363	407
80°	541	335	508
85°	513	590	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	5.0
10°-20°	261.5	14.4
20°-30°	393.3	21.7
30°-40°	428.7	23.6
40°-50°	300.2	16.5
50°-60°	169.9	9.4
60°-70°	93.0	5.1
70°-80°	56.4	3.1
80°-90°	21.4	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°	746.4	41.1
0°-40°	1175.2	64.7
0°-60°	1645.3	90.6
0°-90°	1816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	965	964	956	967	967	92
15°	928	925	924	938	927	261
25°	847	849	847	866	863	389
35°	720	717	718	681	659	444
45°	419	437	365	360	345	325
55°	165	198	202	200	130	151
65°	62	102	92	116	47	64
75°	45	65	35	69	39	47
85°	17	27	19	23	19	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	965.7	965.7	965.7	965.7	965.7
2.5°	968.2	966.9	964.0	969.8	969.4
5°	965.3	963.6	956.1	967.3	967.3
7.5°	961.1	956.9	957.4	963.6	960.7
10°	955.7	948.6	949.9	951.5	951.5
12.5°	943.2	936.6	933.3	938.7	940.3
15°	927.8	925.4	924.5	937.8	926.6
17.5°	906.2	911.6	906.6	917.5	919.1
20°	883.8	894.2	893.3	900.8	898.3
22.5°	865.5	872.1	872.1	881.3	888.8
25°	847.2	848.9	846.8	866.3	863.0
27.5°	823.5	822.3	828.9	838.9	845.5
30°	789.8	790.3	799.4	812.7	818.9
32.5°	759.1	755.3	766.6	772.4	765.7
35°	720.4	717.1	717.5	680.9	659.3
37.5°	667.6	670.5	632.3	565.4	537.1
40°	598.2	604.0	527.9	478.1	462.3
42.5°	514.2	515.9	432.7	416.5	406.1
45°	419.0	437.3	364.6	360.0	345.0
47.5°	332.1	366.2	305.5	308.5	272.7
50°	270.2	304.3	265.2	266.5	212.8
52.5°	213.7	246.9	234.0	230.3	167.1
55°	165.0	197.5	202.0	200.4	130.5
57.5°	121.4	156.3	169.6	175.8	100.6
60°	89.0	127.6	140.5	153.0	76.1
62.5°	70.7	110.6	115.1	133.4	59.0
65°	61.9	101.8	91.5	115.6	46.6
67.5°	55.3	96.9	74.4	102.3	40.7
70°	49.9	87.3	64.4	91.5	38.7
72.5°	49.9	76.5	50.7	81.1	39.1
75°	45.3	65.3	34.9	68.6	39.1
77.5°	40.3	55.7	26.2	55.7	36.6
80°	34.9	43.6	21.6	42.8	32.8
82.5°	25.8	32.8	18.7	32.0	26.6
85°	16.6	27.0	19.1	23.3	18.7
87.5°	7.9	13.7	12.1	11.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)