

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: P291350

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291350
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-LD5-24-A19/156-UNV-L83050-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2487.0 lumens
Efficiency: N/A
Efficacy: 129.8 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

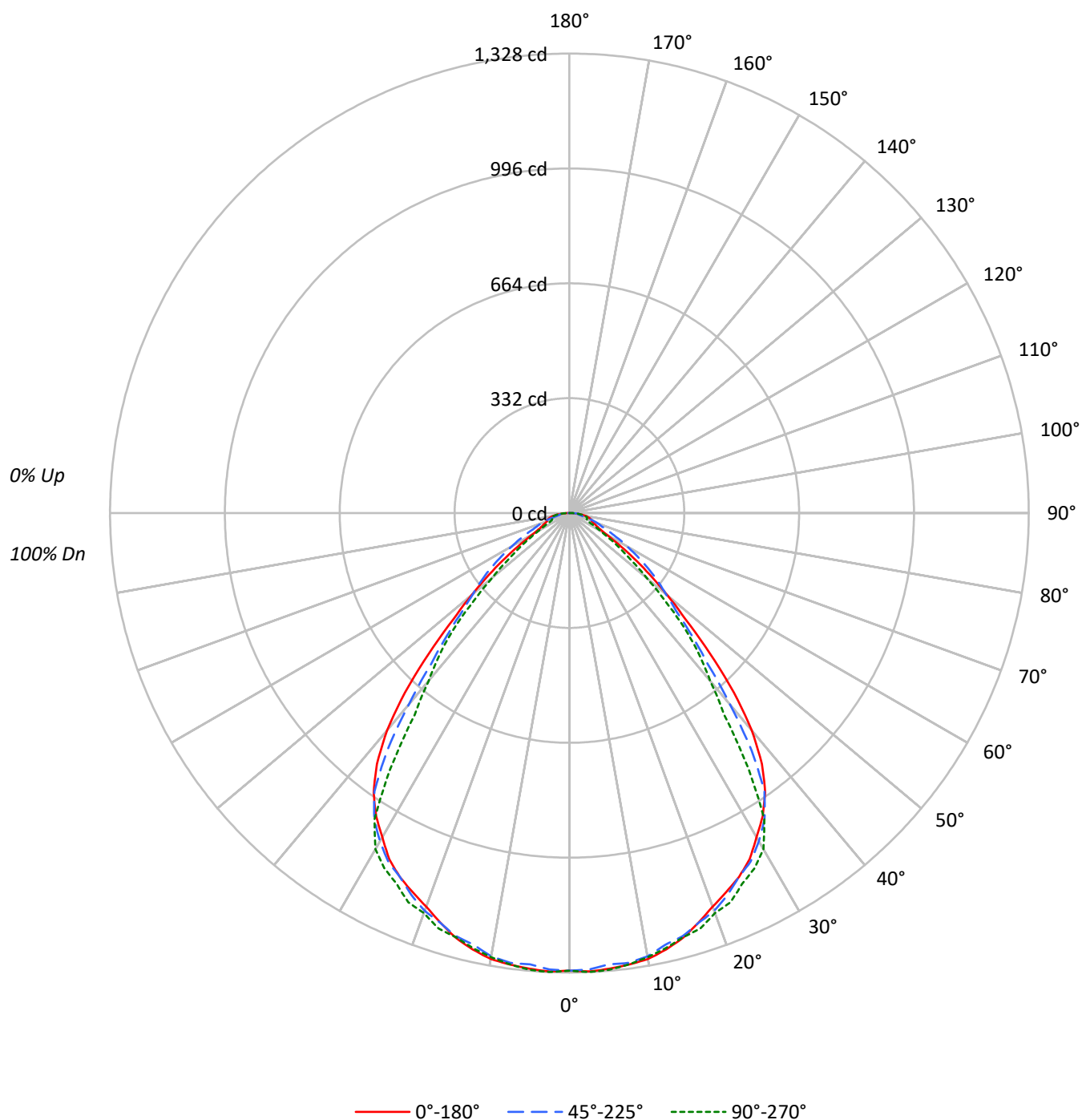
Input Watts (W): 19.158
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3559	3559	3559
5°	3571	3537	3579
10°	3576	3555	3561
15°	3540	3527	3535
20°	3466	3503	3523
25°	3445	3443	3509
30°	3361	3402	3485
35°	3241	3228	2966
40°	2878	2540	2224
45°	2184	1900	1798
50°	1549	1521	1220
55°	1060	1298	839
60°	656	1035	561
65°	540	797	406
70°	537	694	416
75°	646	497	556
80°	741	459	697
85°	704	809	790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	5.0
10°-20°	358.1	14.4
20°-30°	538.6	21.7
30°-40°	587.2	23.6
40°-50°	411.1	16.5
50°-60°	232.7	9.4
60°-70°	127.3	5.1
70°-80°	77.2	3.1
80°-90°	29.3	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°	1022.2	41.1
0°-40°	1609.4	64.7
0°-60°	2253.2	90.6
0°-90°	2487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1322	1320	1309	1325	1325	126
15°	1271	1267	1266	1284	1269	357
25°	1160	1162	1160	1186	1182	533
35°	987	982	983	932	903	608
45°	574	599	499	493	472	446
55°	226	270	277	274	179	207
65°	85	140	125	158	64	87
75°	62	89	48	94	54	64
85°	23	37	26	32	26	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1325.9	1324.2	1320.2	1328.2	1327.6
5°	1321.9	1319.6	1309.4	1324.8	1324.8
7.5°	1316.2	1310.5	1311.1	1319.6	1315.7
10°	1308.8	1299.1	1300.9	1303.1	1303.1
12.5°	1291.7	1282.6	1278.1	1285.5	1287.8
15°	1270.7	1267.3	1266.1	1284.3	1269.0
17.5°	1241.1	1248.5	1241.6	1256.5	1258.7
20°	1210.3	1224.6	1223.4	1233.7	1230.3
22.5°	1185.3	1194.4	1194.4	1206.9	1217.2
25°	1160.2	1162.5	1159.7	1186.4	1181.9
27.5°	1127.8	1126.1	1135.2	1148.9	1158.0
30°	1081.7	1082.2	1094.8	1113.0	1121.5
32.5°	1039.5	1034.4	1049.8	1057.8	1048.7
35°	986.6	982.0	982.6	932.5	902.9
37.5°	914.3	918.3	865.9	774.3	735.5
40°	819.2	827.2	723.0	654.7	633.1
42.5°	704.2	706.5	592.6	570.4	556.2
45°	573.9	598.9	499.3	493.0	472.5
47.5°	454.9	501.6	418.4	422.4	373.5
50°	370.0	416.7	363.2	364.9	291.5
52.5°	292.6	338.2	320.5	315.4	228.9
55°	226.0	270.4	276.7	274.4	178.8
57.5°	166.2	214.1	232.3	240.8	137.8
60°	121.8	174.8	192.4	209.5	104.2
62.5°	96.8	151.4	157.7	182.7	80.8
65°	84.8	139.5	125.2	158.3	63.8
67.5°	75.7	132.6	101.9	140.0	55.8
70°	68.3	119.6	88.2	125.2	52.9
72.5°	68.3	104.8	69.5	111.0	53.5
75°	62.1	89.4	47.8	93.9	53.5
77.5°	55.2	76.3	35.9	76.3	50.1
80°	47.8	59.8	29.6	58.6	45.0
82.5°	35.3	45.0	25.6	43.8	36.4
85°	22.8	37.0	26.2	31.9	25.6
87.5°	10.8	18.8	16.5	15.9	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)