

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: P291388

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291388
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-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2342.0 lumens
Efficiency: N/A
Efficacy: 127.2 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

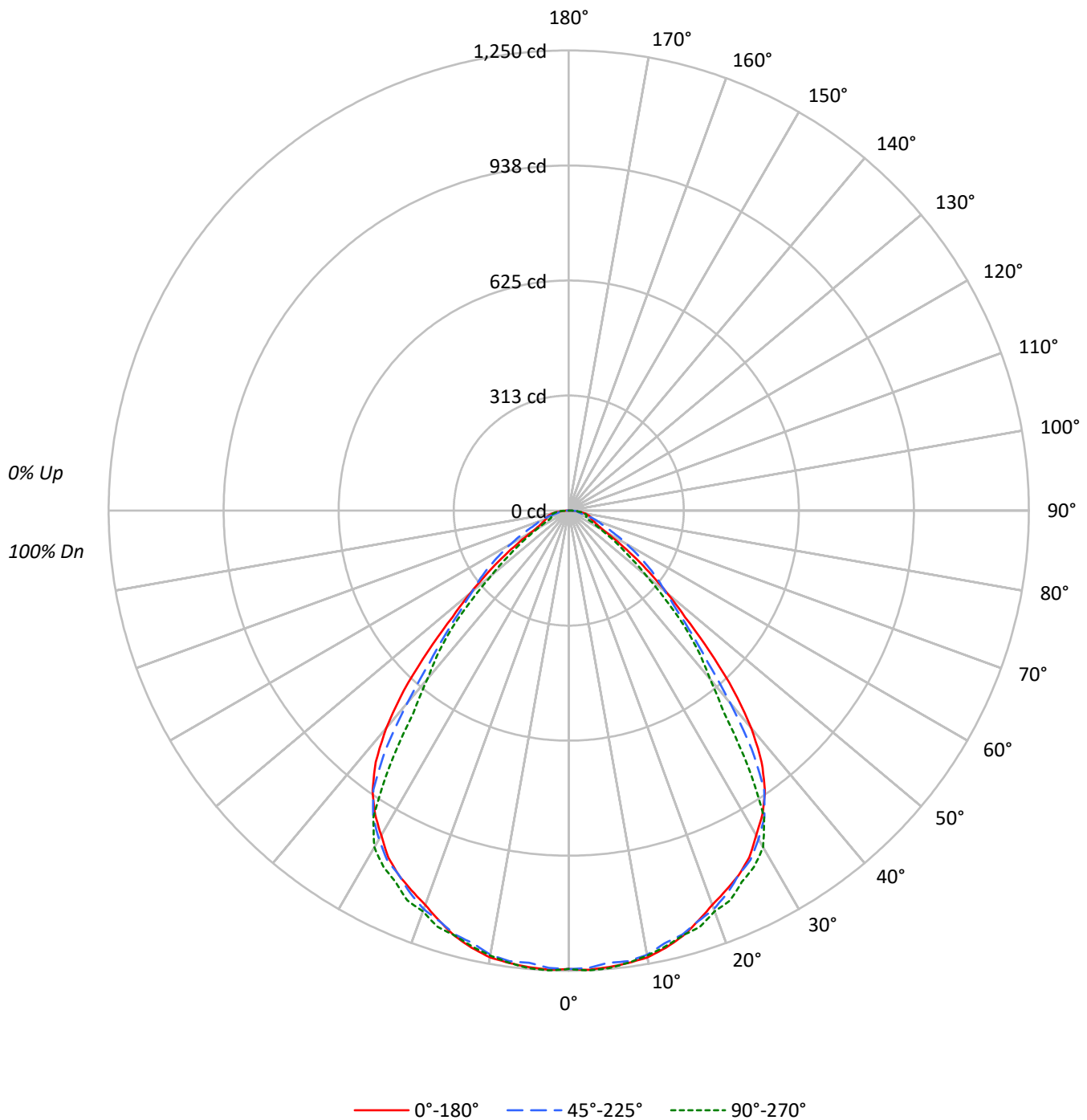
Input Watts (W): 18.414
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3351	3351	3351
5°	3363	3331	3370
10°	3368	3347	3353
15°	3334	3322	3329
20°	3264	3299	3318
25°	3244	3243	3305
30°	3165	3203	3282
35°	3052	3040	2793
40°	2710	2392	2094
45°	2057	1789	1694
50°	1459	1432	1149
55°	998	1222	790
60°	617	975	528
65°	509	751	382
70°	506	654	393
75°	607	468	524
80°	697	432	657
85°	661	763	744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	5.0
10°-20°	337.3	14.4
20°-30°	507.2	21.7
30°-40°	552.9	23.6
40°-50°	387.2	16.5
50°-60°	219.1	9.4
60°-70°	119.9	5.1
70°-80°	72.7	3.1
80°-90°	27.5	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°	962.6	41.1
0°-40°	1515.5	64.7
0°-60°	2121.8	90.6
0°-90°	2342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1245	1245	1245	1245	1245	
5°	1245	1243	1233	1248	1248	118
15°	1197	1193	1192	1210	1195	337
25°	1093	1095	1092	1117	1113	502
35°	929	925	925	878	850	572
45°	540	564	470	464	445	420
55°	213	255	260	258	168	195
65°	80	131	118	149	60	82
75°	58	84	45	88	50	61
85°	21	35	25	30	24	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1245.4	1245.4	1245.4	1245.4	1245.4
2.5°	1248.6	1247.0	1243.2	1250.7	1250.2
5°	1244.8	1242.7	1233.1	1247.5	1247.5
7.5°	1239.5	1234.1	1234.7	1242.7	1239.0
10°	1232.5	1223.4	1225.0	1227.2	1227.2
12.5°	1216.4	1207.9	1203.6	1210.5	1212.7
15°	1196.6	1193.4	1192.3	1209.5	1195.0
17.5°	1168.7	1175.7	1169.3	1183.2	1185.3
20°	1139.8	1153.2	1152.1	1161.8	1158.5
22.5°	1116.2	1124.8	1124.8	1136.6	1146.2
25°	1092.6	1094.7	1092.1	1117.3	1113.0
27.5°	1062.0	1060.4	1069.0	1081.9	1090.4
30°	1018.6	1019.1	1030.9	1048.1	1056.1
32.5°	978.9	974.1	988.6	996.1	987.5
35°	929.1	924.8	925.3	878.1	850.3
37.5°	861.0	864.7	815.4	729.1	692.7
40°	771.5	779.0	680.9	616.5	596.2
42.5°	663.2	665.3	558.1	537.2	523.8
45°	540.4	564.0	470.2	464.3	445.0
47.5°	428.4	472.3	394.0	397.8	351.7
50°	348.5	392.4	342.0	343.6	274.5
52.5°	275.6	318.4	301.8	297.0	215.5
55°	212.8	254.7	260.5	258.4	168.3
57.5°	156.5	201.6	218.7	226.8	129.7
60°	114.7	164.6	181.2	197.3	98.1
62.5°	91.1	142.6	148.5	172.1	76.1
65°	79.9	131.3	117.9	149.0	60.0
67.5°	71.3	124.9	96.0	131.9	52.5
70°	64.3	112.6	83.1	117.9	49.9
72.5°	64.3	98.6	65.4	104.5	50.4
75°	58.4	84.2	45.0	88.5	50.4
77.5°	52.0	71.8	33.8	71.8	47.2
80°	45.0	56.3	27.9	55.2	42.4
82.5°	33.2	42.4	24.1	41.3	34.3
85°	21.4	34.8	24.7	30.0	24.1
87.5°	10.2	17.7	15.5	15.0	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)