

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: P291502

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291502
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-LD5-32-A19/156-UNV-L92765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2591.0 lumens
Efficiency: N/A
Efficacy: 102.1 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

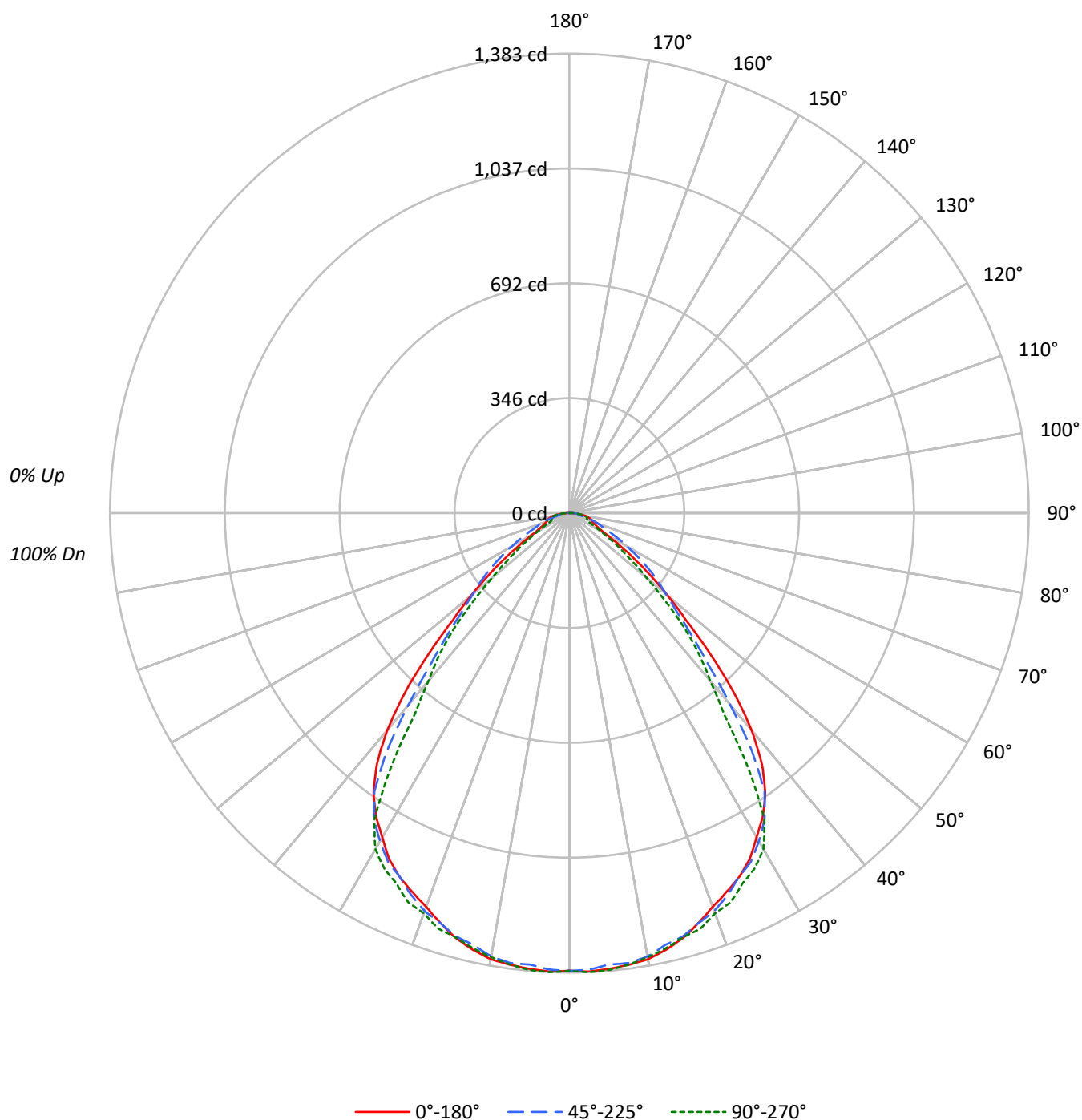
Input Watts (W): 25.389
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3708	3708	3708
5°	3720	3685	3728
10°	3726	3703	3710
15°	3688	3675	3683
20°	3611	3650	3670
25°	3589	3587	3656
30°	3502	3544	3631
35°	3377	3363	3090
40°	2998	2646	2317
45°	2275	1980	1874
50°	1614	1584	1271
55°	1105	1353	874
60°	683	1079	584
65°	563	831	423
70°	560	723	434
75°	672	518	580
80°	772	477	727
85°	732	843	824



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	5.0
10°-20°	373.1	14.4
20°-30°	561.1	21.7
30°-40°	611.7	23.6
40°-50°	428.3	16.5
50°-60°	242.5	9.4
60°-70°	132.7	5.1
70°-80°	80.4	3.1
80°-90°	30.5	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°	1065.0	41.1
0°-40°	1676.7	64.7
0°-60°	2347.5	90.6
0°-90°	2591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1377	1375	1364	1380	1380	131
15°	1324	1320	1319	1338	1322	372
25°	1209	1211	1208	1236	1231	555
35°	1028	1023	1024	972	941	633
45°	598	624	520	514	492	464
55°	236	282	288	286	186	215
65°	88	145	130	165	66	91
75°	65	93	50	98	56	67
85°	24	39	27	33	27	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.8	1377.8	1377.8	1377.8	1377.8
2.5°	1381.4	1379.6	1375.4	1383.7	1383.1
5°	1377.2	1374.8	1364.2	1380.2	1380.2
7.5°	1371.3	1365.3	1365.9	1374.8	1370.7
10°	1363.6	1353.5	1355.3	1357.6	1357.6
12.5°	1345.8	1336.3	1331.5	1339.2	1341.6
15°	1323.8	1320.3	1319.1	1338.1	1322.0
17.5°	1293.0	1300.7	1293.6	1309.0	1311.4
20°	1261.0	1275.8	1274.6	1285.3	1281.7
22.5°	1234.9	1244.3	1244.3	1257.4	1268.1
25°	1208.8	1211.1	1208.2	1236.0	1231.3
27.5°	1174.9	1173.2	1182.7	1196.9	1206.4
30°	1126.9	1127.5	1140.5	1159.5	1168.4
32.5°	1083.0	1077.7	1093.7	1102.0	1092.5
35°	1027.9	1023.1	1023.7	971.5	940.7
37.5°	952.5	956.7	902.1	806.6	766.3
40°	853.5	861.8	753.2	682.1	659.5
42.5°	733.7	736.0	617.4	594.3	579.5
45°	597.9	624.0	520.2	513.6	492.3
47.5°	473.9	522.5	435.9	440.1	389.1
50°	385.5	434.2	378.4	380.2	303.7
52.5°	304.9	352.3	333.9	328.6	238.4
55°	235.5	281.7	288.3	285.9	186.2
57.5°	173.2	223.0	242.0	250.9	143.5
60°	126.9	182.1	200.5	218.3	108.5
62.5°	100.8	157.8	164.3	190.4	84.2
65°	88.4	145.3	130.5	164.9	66.4
67.5°	78.9	138.2	106.2	145.9	58.1
70°	71.2	124.6	91.9	130.5	55.2
72.5°	71.2	109.1	72.4	115.7	55.8
75°	64.6	93.1	49.8	97.9	55.8
77.5°	57.5	79.5	37.4	79.5	52.2
80°	49.8	62.3	30.8	61.1	46.9
82.5°	36.8	46.9	26.7	45.7	38.0
85°	23.7	38.6	27.3	33.2	26.7
87.5°	11.3	19.6	17.2	16.6	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)