

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: P291394

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291394
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-LD5-28-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: 2570.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

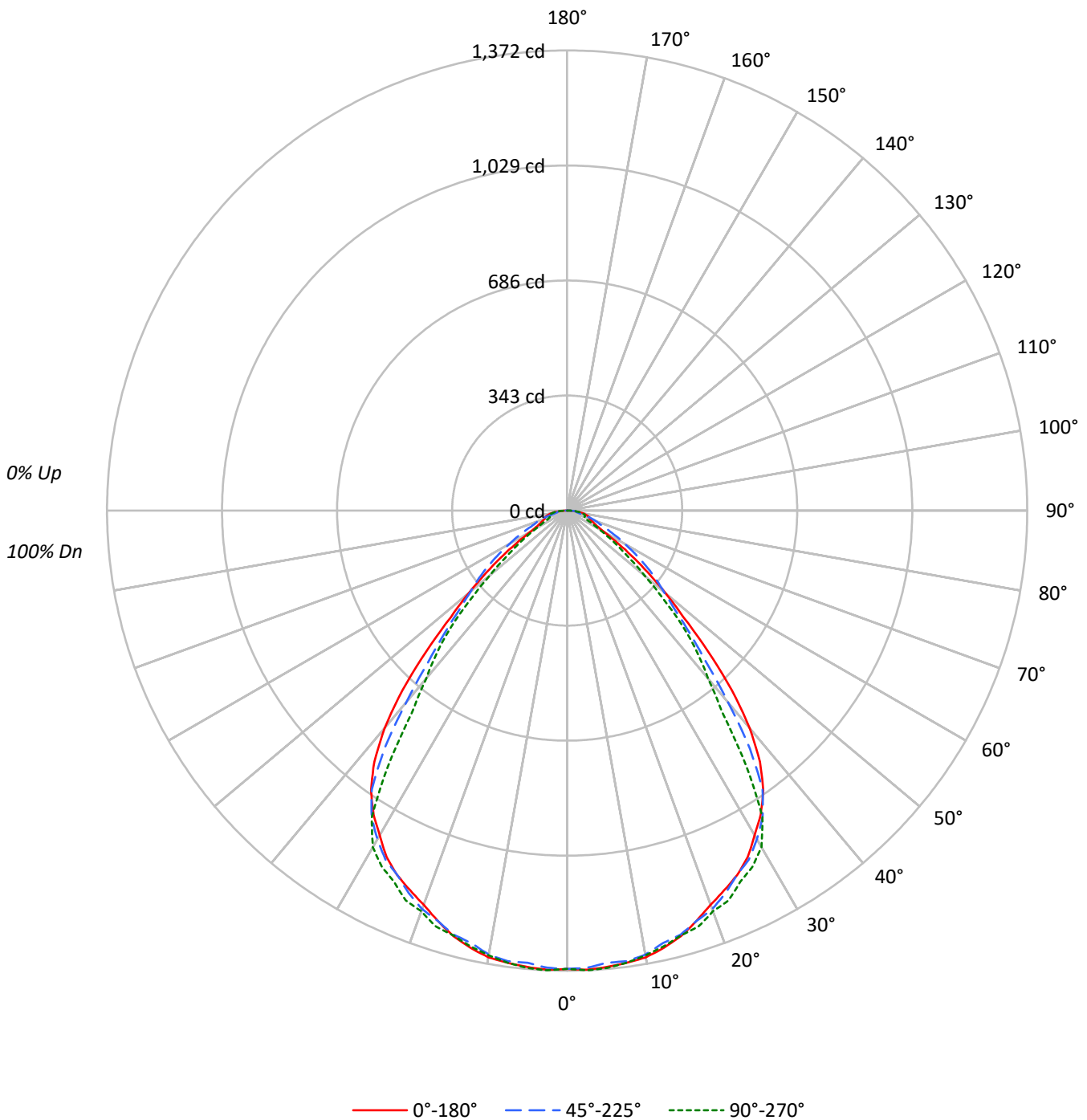
Input Watts (W): 22.227
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	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					100			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3677	3677	3677
5°	3690	3655	3698
10°	3696	3673	3680
15°	3658	3645	3653
20°	3582	3621	3641
25°	3560	3558	3626
30°	3473	3515	3601
35°	3349	3336	3065
40°	2974	2624	2298
45°	2257	1963	1858
50°	1601	1571	1261
55°	1096	1341	867
60°	678	1070	580
65°	558	824	420
70°	555	718	430
75°	666	514	575
80°	766	474	721
85°	726	837	818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	5.0
10°-20°	370.1	14.4
20°-30°	556.6	21.7
30°-40°	606.7	23.6
40°-50°	424.8	16.5
50°-60°	240.5	9.4
60°-70°	131.6	5.1
70°-80°	79.8	3.1
80°-90°	30.2	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°	1056.3	41.1
0°-40°	1663.1	64.7
0°-60°	2328.4	90.6
0°-90°	2570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2570.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1366	1364	1353	1369	1369	130
15°	1313	1310	1308	1327	1311	369
25°	1199	1201	1198	1226	1221	551
35°	1020	1015	1015	964	933	628
45°	593	619	516	510	488	461
55°	234	279	286	284	185	214
65°	88	144	129	164	66	90
75°	64	92	49	97	55	67
85°	24	38	27	33	26	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1366.6	1366.6	1366.6	1366.6	1366.6
2.5°	1370.2	1368.4	1364.3	1372.5	1371.9
5°	1366.0	1363.7	1353.1	1369.0	1369.0
7.5°	1360.2	1354.3	1354.9	1363.7	1359.6
10°	1352.5	1342.5	1344.3	1346.6	1346.6
12.5°	1334.9	1325.4	1320.7	1328.4	1330.7
15°	1313.1	1309.6	1308.4	1327.2	1311.3
17.5°	1282.5	1290.1	1283.1	1298.4	1300.7
20°	1250.7	1265.4	1264.3	1274.9	1271.3
22.5°	1224.8	1234.3	1234.3	1247.2	1257.8
25°	1199.0	1201.3	1198.4	1226.0	1221.3
27.5°	1165.4	1163.7	1173.1	1187.2	1196.6
30°	1117.8	1118.4	1131.3	1150.1	1159.0
32.5°	1074.2	1068.9	1084.8	1093.1	1083.7
35°	1019.5	1014.8	1015.4	963.6	933.0
37.5°	944.8	948.9	894.8	800.1	760.1
40°	846.6	854.8	747.1	676.5	654.2
42.5°	727.7	730.1	612.4	589.5	574.8
45°	593.0	618.9	515.9	509.5	488.3
47.5°	470.1	518.3	432.4	436.5	385.9
50°	382.4	430.6	375.3	377.1	301.2
52.5°	302.4	349.5	331.2	325.9	236.5
55°	233.6	279.4	285.9	283.6	184.7
57.5°	171.8	221.2	240.0	248.9	142.4
60°	125.9	180.6	198.8	216.5	107.7
62.5°	100.0	156.5	163.0	188.8	83.5
65°	87.7	144.1	129.4	163.5	65.9
67.5°	78.2	137.1	105.3	144.7	57.7
70°	70.6	123.5	91.2	129.4	54.7
72.5°	70.6	108.2	71.8	114.7	55.3
75°	64.1	92.4	49.4	97.1	55.3
77.5°	57.1	78.8	37.1	78.8	51.8
80°	49.4	61.8	30.6	60.6	46.5
82.5°	36.5	46.5	26.5	45.3	37.7
85°	23.5	38.2	27.1	32.9	26.5
87.5°	11.2	19.4	17.1	16.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)