

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: P476297

Luminaire Tested: **14GR-LD5-28-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476297
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A-UNV-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2790.3 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

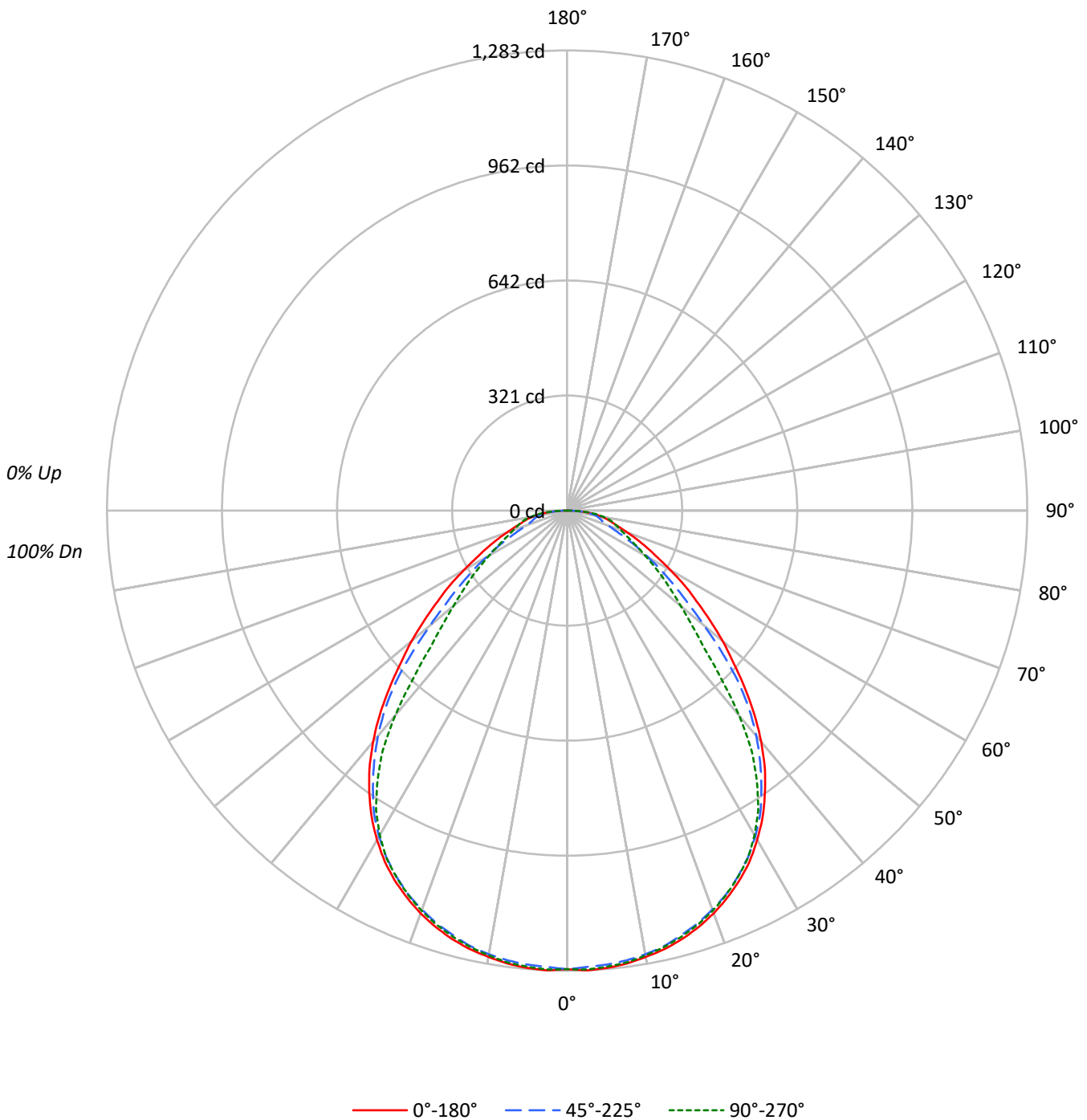
Input Watts (W): 23.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33				33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4309	4309	4309
5°	4329	4297	4318
10°	4324	4297	4309
15°	4316	4278	4291
20°	4285	4246	4257
25°	4229	4187	4190
30°	4125	4082	4065
35°	3956	3884	3796
40°	3703	3609	3284
45°	3345	3218	2567
50°	2966	2612	2171
55°	2589	2144	1915
60°	2244	1764	1691
65°	1969	1415	1561
70°	1756	1201	1570
75°	1713	1267	1755
80°	1898	1597	2012
85°	1979	1705	2354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	4.3
10°-20°	347.5	12.5
20°-30°	519.9	18.6
30°-40°	586.9	21.0
40°-50°	497.9	17.8
50°-60°	336.9	12.1
60°-70°	201.1	7.2
70°-80°	125.9	4.5
80°-90°	53.0	1.9
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°	988.8	35.4
0°-40°	1575.6	56.5
0°-60°	2410.4	86.4
0°-90°	2790.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2790.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1279	1279	1279	1279	1279	
5°	1280	1276	1270	1279	1277	122
15°	1237	1235	1226	1235	1230	349
25°	1137	1134	1126	1132	1127	523
35°	962	955	944	936	923	599
45°	702	704	675	579	539	541
55°	441	420	365	327	326	397
65°	247	205	178	189	196	247
75°	132	117	97	128	135	141
85°	51	49	44	57	61	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.7	1278.7	1278.7	1278.7	1278.7
2.5°	1283.2	1279.3	1273.4	1281.3	1280.6
5°	1279.9	1276.1	1270.3	1279.3	1276.7
7.5°	1274.1	1270.8	1265.1	1273.4	1270.8
10°	1263.7	1261.2	1256.0	1263.1	1259.3
12.5°	1252.7	1250.8	1244.3	1250.8	1246.9
15°	1237.2	1234.6	1226.2	1234.6	1230.0
17.5°	1217.8	1214.5	1207.4	1214.5	1210.6
20°	1195.0	1191.2	1184.0	1191.2	1187.3
22.5°	1167.8	1164.6	1158.2	1164.6	1159.4
25°	1137.4	1133.5	1126.3	1131.5	1127.0
27.5°	1102.4	1097.2	1090.7	1094.6	1092.1
30°	1060.2	1053.8	1049.2	1049.2	1044.7
32.5°	1014.2	1009.7	1002.0	997.4	991.5
35°	961.7	955.3	944.3	935.9	922.8
37.5°	905.4	897.6	884.0	862.5	845.1
40°	841.9	832.1	820.5	778.3	746.6
42.5°	773.8	771.8	751.8	679.8	635.8
45°	701.9	704.5	675.3	578.7	538.6
47.5°	629.2	638.3	585.3	490.6	469.9
50°	565.8	569.0	498.3	425.8	414.1
52.5°	500.4	495.1	425.1	374.5	366.1
55°	440.7	420.0	364.9	326.7	326.0
57.5°	388.1	349.9	311.7	283.3	286.5
60°	333.0	290.3	261.8	246.2	250.9
62.5°	284.5	243.7	218.4	213.9	221.6
65°	246.9	204.8	177.5	189.2	195.8
67.5°	211.3	175.6	144.5	172.4	175.0
70°	178.2	152.2	121.9	158.8	159.4
72.5°	151.0	134.8	105.6	143.9	145.8
75°	131.6	117.3	97.3	128.3	134.8
77.5°	115.4	100.4	90.1	110.9	121.9
80°	97.8	80.9	82.3	92.6	103.7
82.5°	75.2	62.9	65.4	76.5	84.2
85°	51.2	48.6	44.1	57.0	60.9
87.5°	27.2	26.0	22.7	32.4	30.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)