

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: P276314

Luminaire Tested: **24CZ2-30HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276314
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3204.0 lumens
Efficiency: N/A
Efficacy: 159.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

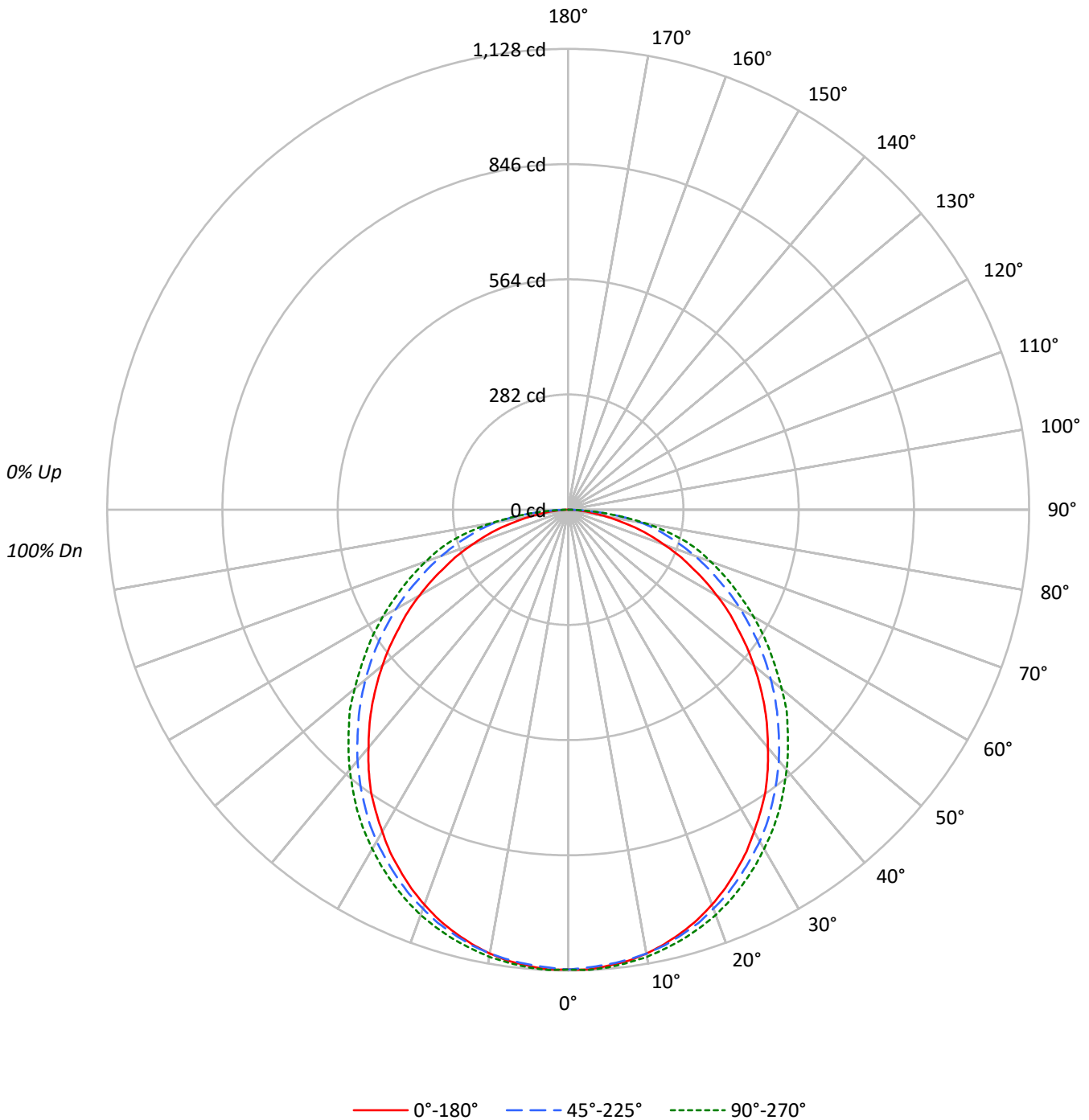
Input Watts (W): 20.074329
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1514	1514	1514
5°	1513	1509	1519
10°	1507	1507	1518
15°	1493	1500	1515
20°	1473	1488	1511
25°	1446	1473	1502
30°	1413	1456	1489
35°	1382	1433	1478
40°	1335	1409	1460
45°	1292	1381	1445
50°	1242	1355	1427
55°	1187	1330	1413
60°	1131	1309	1410
65°	1060	1286	1419
70°	981	1293	1457
75°	878	1317	1540
80°	710	1395	1506
85°	534	1226	1193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	3.3
10°-20°	304.5	9.5
20°-30°	457.7	14.3
30°-40°	545.2	17.0
40°-50°	558.0	17.4
50°-60°	502.4	15.7
60°-70°	394.5	12.3
70°-80°	256.0	8.0
80°-90°	79.2	2.5
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°	868.7	27.1
0°-40°	1413.9	44.1
0°-60°	2474.3	77.2
0°-90°	3204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1120	1122	1117	1124	1125	106
15°	1072	1075	1077	1086	1088	302
25°	974	982	992	1008	1012	449
35°	842	852	872	894	900	525
45°	679	695	726	753	759	523
55°	506	528	567	596	602	453
65°	333	358	404	438	446	331
75°	169	202	253	288	296	179
85°	35	64	79	77	77	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.6	1125.6	1125.6	1125.6	1125.6
2.5°	1126.6	1126.6	1121.5	1126.6	1127.6
5°	1120.5	1122.5	1117.4	1123.6	1124.6
7.5°	1114.4	1114.4	1111.3	1117.4	1118.5
10°	1103.2	1104.2	1103.2	1110.3	1111.3
12.5°	1088.9	1091.0	1092.0	1099.1	1100.1
15°	1071.6	1074.7	1076.7	1085.9	1087.9
17.5°	1052.3	1055.4	1060.5	1070.6	1072.7
20°	1028.9	1033.0	1039.1	1052.3	1055.4
22.5°	1003.5	1007.5	1017.7	1029.9	1035.0
25°	973.9	982.1	992.3	1008.5	1011.6
27.5°	944.4	951.6	964.8	982.1	986.2
30°	909.8	921.0	937.3	954.6	958.7
32.5°	876.2	887.4	906.8	925.1	930.2
35°	841.6	851.8	872.2	893.5	899.7
37.5°	802.0	815.2	837.6	858.9	865.1
40°	760.2	776.5	802.0	824.3	831.5
42.5°	720.5	737.8	763.3	787.7	795.8
45°	678.8	695.1	725.6	753.1	759.2
47.5°	636.1	654.4	687.0	714.4	724.6
50°	593.3	612.7	647.3	675.8	681.9
52.5°	550.6	570.9	607.6	638.1	641.2
55°	505.8	528.2	566.9	596.4	602.5
57.5°	465.1	484.4	526.2	556.7	563.8
60°	420.3	441.7	486.5	515.0	524.1
62.5°	377.6	400.0	446.8	475.3	483.4
65°	332.8	358.2	404.0	437.6	445.8
67.5°	294.1	318.5	367.4	400.0	408.1
70°	249.3	276.8	328.7	362.3	370.4
72.5°	210.7	239.2	291.1	323.6	335.8
75°	168.9	201.5	253.4	288.0	296.2
77.5°	128.2	165.9	218.8	245.3	245.3
80°	91.6	131.3	180.1	192.3	194.4
82.5°	60.0	98.7	133.3	132.3	132.3
85°	34.6	64.1	79.4	77.3	77.3
87.5°	13.2	26.5	28.5	28.5	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)