

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: P276469

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276469
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-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3181.8 lumens
Efficiency: N/A
Efficacy: 157.7 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

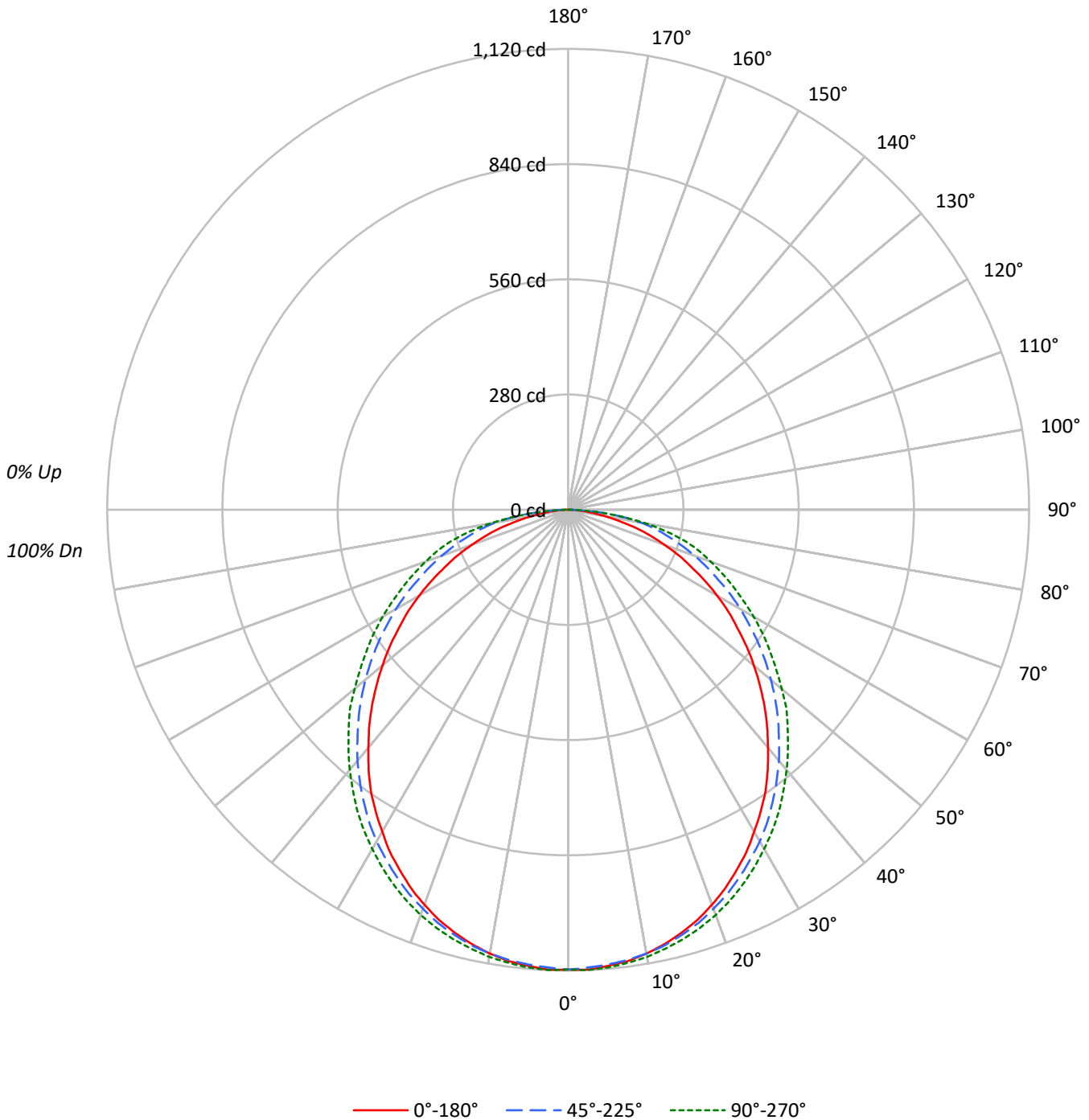
Input Watts (W): 20.181
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1504	1504	1504
5°	1503	1499	1508
10°	1497	1497	1508
15°	1482	1489	1505
20°	1463	1478	1501
25°	1436	1463	1491
30°	1404	1446	1479
35°	1373	1423	1467
40°	1326	1399	1450
45°	1283	1371	1435
50°	1233	1346	1417
55°	1178	1320	1403
60°	1123	1300	1401
65°	1052	1277	1409
70°	974	1284	1447
75°	872	1308	1529
80°	705	1386	1495
85°	531	1216	1186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	3.3
10°-20°	302.4	9.5
20°-30°	454.5	14.3
30°-40°	541.4	17.0
40°-50°	554.1	17.4
50°-60°	498.9	15.7
60°-70°	391.8	12.3
70°-80°	254.3	8.0
80°-90°	78.6	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°	862.7	27.1
0°-40°	1404.1	44.1
0°-60°	2457.1	77.2
0°-90°	3181.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3181.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1113	1115	1110	1116	1117	106
15°	1064	1067	1069	1078	1080	300
25°	967	975	985	1002	1005	446
35°	836	846	866	887	893	521
45°	674	690	721	748	754	520
55°	502	524	563	592	598	450
65°	330	356	401	435	443	329
75°	168	200	252	286	294	178
85°	34	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°	1117.8	1117.8	1117.8	1117.8	1117.8
2.5°	1118.8	1118.8	1113.7	1118.8	1119.8
5°	1112.7	1114.7	1109.7	1115.8	1116.8
7.5°	1106.7	1106.7	1103.6	1109.7	1110.7
10°	1095.5	1096.6	1095.5	1102.6	1103.6
12.5°	1081.4	1083.4	1084.4	1091.5	1092.5
15°	1064.2	1067.2	1069.3	1078.4	1080.4
17.5°	1045.0	1048.0	1053.1	1063.2	1065.2
20°	1021.8	1025.8	1031.9	1045.0	1048.0
22.5°	996.5	1000.5	1010.6	1022.8	1027.8
25°	967.2	975.3	985.4	1001.6	1004.6
27.5°	937.9	945.0	958.1	975.3	979.3
30°	903.5	914.6	930.8	948.0	952.0
32.5°	870.2	881.3	900.5	918.7	923.7
35°	835.8	845.9	866.1	887.4	893.4
37.5°	796.4	809.5	831.8	853.0	859.1
40°	755.0	771.1	796.4	818.6	825.7
42.5°	715.5	732.7	758.0	782.2	790.3
45°	674.1	690.3	720.6	747.9	753.9
47.5°	631.7	649.8	682.2	709.5	719.6
50°	589.2	608.4	642.8	671.1	677.1
52.5°	546.8	567.0	603.4	633.7	636.7
55°	502.3	524.5	562.9	592.2	598.3
57.5°	461.9	481.1	522.5	552.8	559.9
60°	417.4	438.6	483.1	511.4	520.5
62.5°	375.0	397.2	443.7	472.0	480.1
65°	330.5	355.7	401.2	434.6	442.7
67.5°	292.1	316.3	364.8	397.2	405.3
70°	247.6	274.9	326.4	359.8	367.9
72.5°	209.2	237.5	289.0	321.4	333.5
75°	167.8	200.1	251.7	286.0	294.1
77.5°	127.3	164.7	217.3	243.6	243.6
80°	91.0	130.4	178.9	191.0	193.0
82.5°	59.6	98.0	132.4	131.4	131.4
85°	34.4	63.7	78.8	76.8	76.8
87.5°	13.1	26.3	28.3	28.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)