

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: P276477

Luminaire Tested: **24CZ2-35HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276477
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: 24CZ2-35HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.0 lumens
Efficiency: N/A
Efficacy: 146.5 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

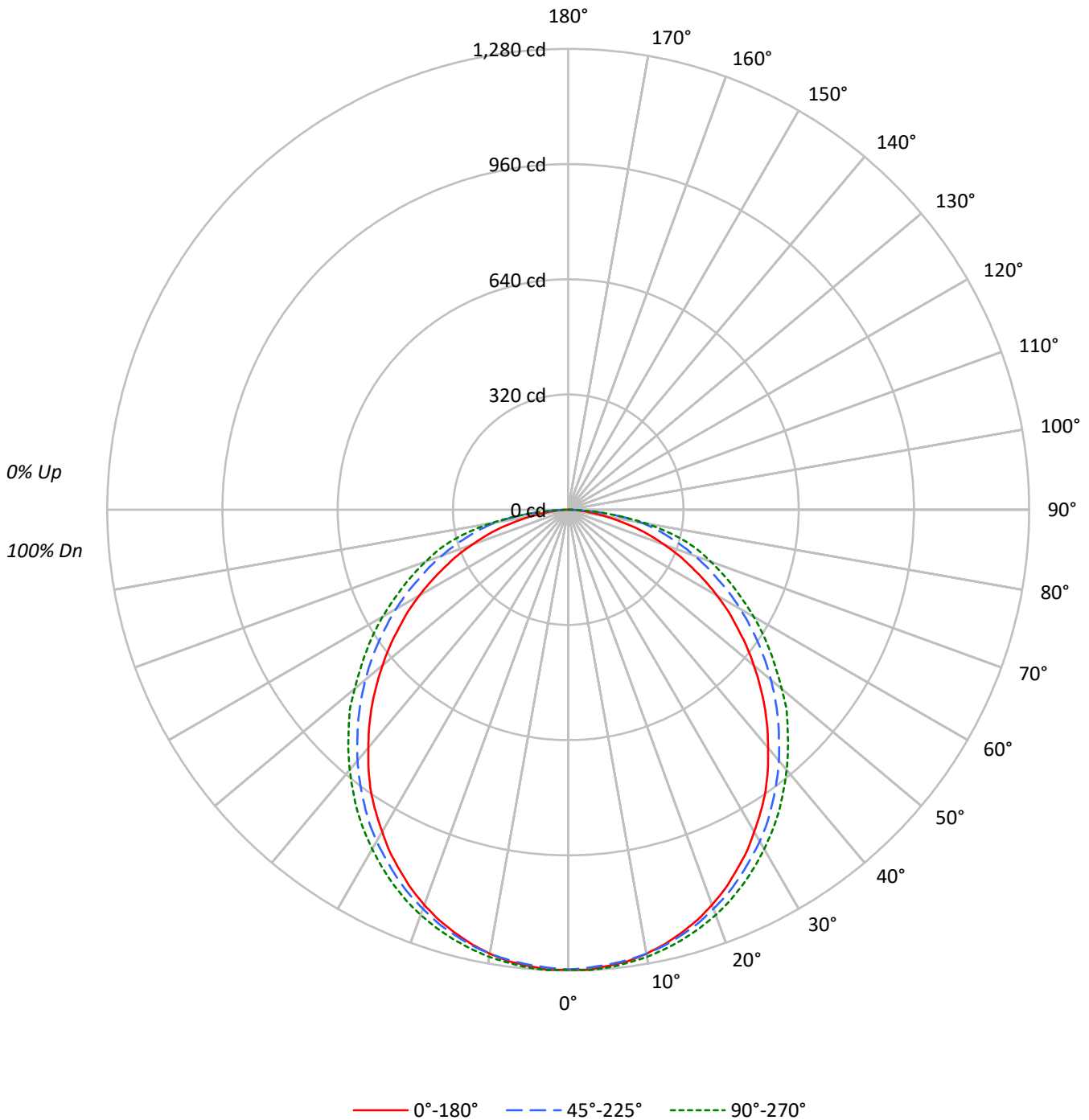
Input Watts (W): 24.831
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1719	1719	1719
5°	1718	1713	1724
10°	1711	1711	1724
15°	1695	1703	1720
20°	1672	1689	1715
25°	1641	1672	1705
30°	1605	1653	1691
35°	1569	1626	1677
40°	1516	1599	1658
45°	1466	1567	1640
50°	1410	1538	1620
55°	1347	1510	1604
60°	1284	1486	1601
65°	1203	1460	1611
70°	1113	1468	1654
75°	997	1496	1748
80°	806	1585	1710
85°	607	1391	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.3
10°-20°	345.6	9.5
20°-30°	519.6	14.3
30°-40°	618.9	17.0
40°-50°	633.4	17.4
50°-60°	570.2	15.7
60°-70°	447.8	12.3
70°-80°	290.6	8.0
80°-90°	89.9	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°	986.2	27.1
0°-40°	1605.0	44.1
0°-60°	2808.7	77.2
0°-90°	3637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3637.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1272	1274	1268	1275	1277	121
15°	1216	1220	1222	1233	1235	343
25°	1106	1115	1126	1145	1148	509
35°	955	967	990	1014	1021	596
45°	771	789	824	855	862	594
55°	574	600	644	677	684	515
65°	378	407	459	497	506	376
75°	192	229	288	327	336	203
85°	39	73	90	88	88	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.7	1277.7	1277.7	1277.7	1277.7
2.5°	1278.9	1278.9	1273.1	1278.9	1280.0
5°	1271.9	1274.2	1268.5	1275.4	1276.6
7.5°	1265.0	1265.0	1261.5	1268.5	1269.6
10°	1252.3	1253.5	1252.3	1260.4	1261.5
12.5°	1236.1	1238.4	1239.6	1247.7	1248.8
15°	1216.5	1219.9	1222.3	1232.7	1235.0
17.5°	1194.5	1198.0	1203.8	1215.3	1217.6
20°	1168.0	1172.6	1179.5	1194.5	1198.0
22.5°	1139.1	1143.7	1155.3	1169.1	1174.9
25°	1105.6	1114.8	1126.4	1144.9	1148.3
27.5°	1072.1	1080.2	1095.2	1114.8	1119.4
30°	1032.8	1045.5	1064.0	1083.6	1088.2
32.5°	994.7	1007.4	1029.3	1050.1	1055.9
35°	955.4	966.9	990.1	1014.3	1021.2
37.5°	910.3	925.4	950.8	975.0	982.0
40°	863.0	881.5	910.3	935.8	943.8
42.5°	817.9	837.6	866.4	894.2	903.4
45°	770.6	789.0	823.7	854.9	861.8
47.5°	722.0	742.8	779.8	811.0	822.5
50°	673.5	695.5	734.7	767.1	774.0
52.5°	625.0	648.1	689.7	724.3	727.8
55°	574.2	599.6	643.5	677.0	683.9
57.5°	528.0	549.9	597.3	631.9	640.0
60°	477.1	501.4	552.2	584.6	595.0
62.5°	428.6	454.0	507.2	539.5	548.7
65°	377.8	406.6	458.6	496.8	506.0
67.5°	333.9	361.6	417.0	454.0	463.3
70°	283.0	314.2	373.1	411.3	420.5
72.5°	239.1	271.5	330.4	367.4	381.2
75°	191.8	228.7	287.7	326.9	336.2
77.5°	145.6	188.3	248.4	278.4	278.4
80°	104.0	149.0	204.5	218.3	220.7
82.5°	68.2	112.1	151.3	150.2	150.2
85°	39.3	72.8	90.1	87.8	87.8
87.5°	15.0	30.0	32.3	32.3	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)