

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: P276478

Luminaire Tested: **24CZ2-35HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276478
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-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: 3647.0 lumens
Efficiency: N/A
Efficacy: 146.9 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

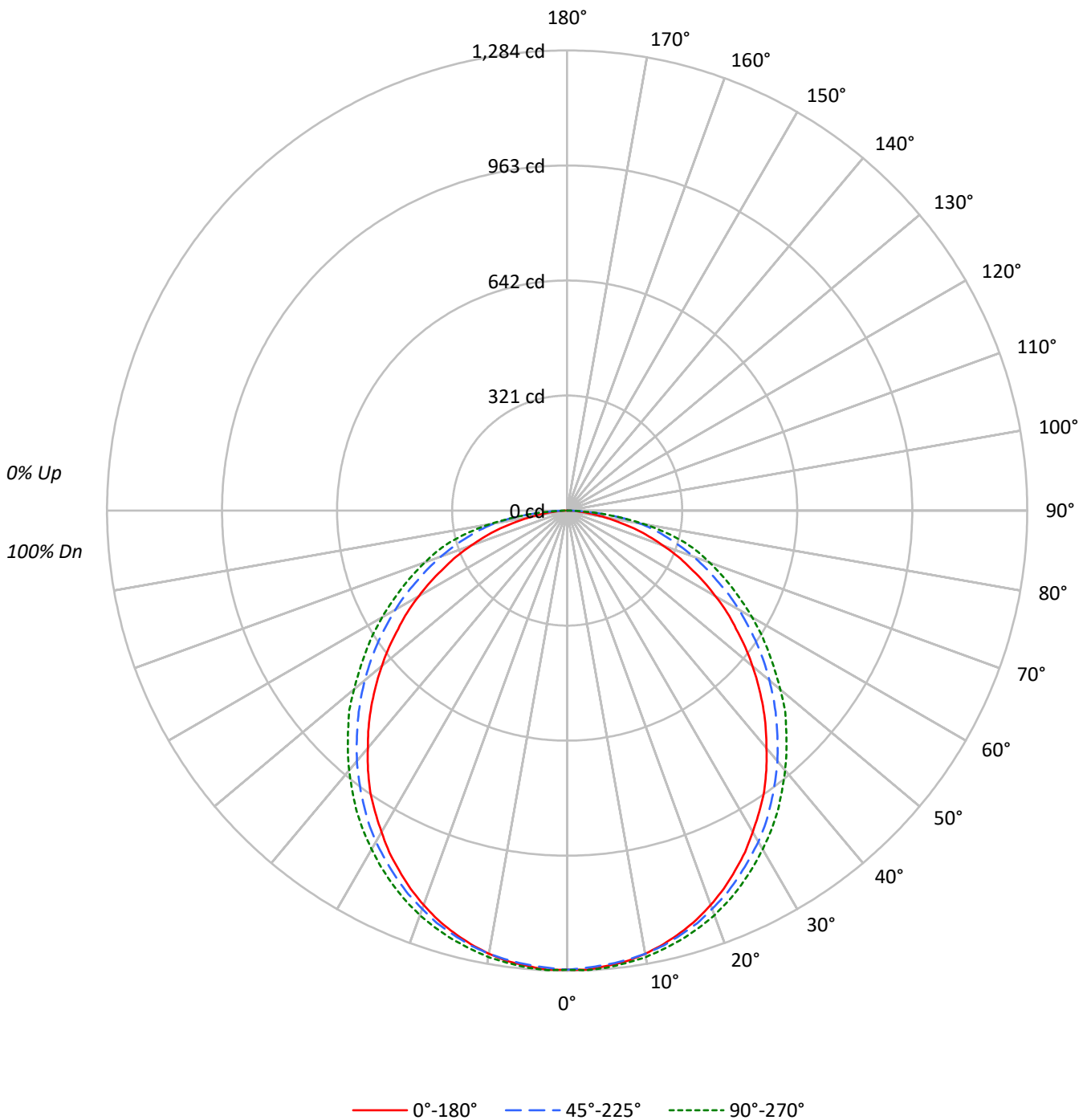
Input Watts (W): 24.831
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1724	1724	1724
5°	1723	1718	1729
10°	1716	1716	1728
15°	1699	1707	1725
20°	1677	1693	1720
25°	1646	1677	1709
30°	1609	1658	1695
35°	1574	1631	1682
40°	1520	1603	1662
45°	1470	1572	1644
50°	1414	1542	1625
55°	1350	1514	1609
60°	1287	1490	1605
65°	1206	1464	1615
70°	1116	1472	1659
75°	1000	1499	1752
80°	808	1588	1715
85°	608	1396	1359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	3.3
10°-20°	346.6	9.5
20°-30°	521.0	14.3
30°-40°	620.6	17.0
40°-50°	635.1	17.4
50°-60°	571.8	15.7
60°-70°	449.1	12.3
70°-80°	291.4	8.0
80°-90°	90.1	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°	988.9	27.1
0°-40°	1609.4	44.1
0°-60°	2816.3	77.2
0°-90°	3647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1275	1278	1272	1279	1280	121
15°	1220	1223	1226	1236	1238	344
25°	1109	1118	1130	1148	1152	511
35°	958	970	993	1017	1024	598
45°	773	791	826	857	864	596
55°	576	601	645	679	686	516
65°	379	408	460	498	507	377
75°	192	229	288	328	337	204
85°	39	73	90	88	88	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.2	1281.2	1281.2	1281.2	1281.2
2.5°	1282.4	1282.4	1276.6	1282.4	1283.5
5°	1275.4	1277.7	1271.9	1278.9	1280.0
7.5°	1268.5	1268.5	1265.0	1271.9	1273.1
10°	1255.7	1256.9	1255.7	1263.8	1265.0
12.5°	1239.5	1241.8	1243.0	1251.1	1252.2
15°	1219.8	1223.3	1225.6	1236.0	1238.3
17.5°	1197.8	1201.3	1207.1	1218.6	1221.0
20°	1171.2	1175.8	1182.7	1197.8	1201.3
22.5°	1142.2	1146.8	1158.4	1172.3	1178.1
25°	1108.6	1117.9	1129.5	1148.0	1151.5
27.5°	1075.0	1083.1	1098.2	1117.9	1122.5
30°	1035.6	1048.4	1066.9	1086.6	1091.2
32.5°	997.4	1010.1	1032.1	1053.0	1058.8
35°	958.0	969.6	992.8	1017.1	1024.0
37.5°	912.8	927.9	953.4	977.7	984.6
40°	865.3	883.9	912.8	938.3	946.4
42.5°	820.2	839.8	868.8	896.6	905.9
45°	772.7	791.2	825.9	857.2	864.2
47.5°	724.0	744.9	781.9	813.2	824.8
50°	675.4	697.4	736.7	769.2	776.1
52.5°	626.7	649.9	691.6	726.3	729.8
55°	575.7	601.2	645.2	678.8	685.8
57.5°	529.4	551.4	598.9	633.7	641.8
60°	478.4	502.8	553.7	586.2	596.6
62.5°	429.8	455.3	508.5	541.0	550.2
65°	378.8	407.8	459.9	498.1	507.4
67.5°	334.8	362.6	418.2	455.3	464.5
70°	283.8	315.1	374.2	412.4	421.7
72.5°	239.8	272.2	331.3	368.4	382.3
75°	192.3	229.4	288.4	327.8	337.1
77.5°	146.0	188.8	249.1	279.2	279.2
80°	104.3	149.4	205.0	218.9	221.3
82.5°	68.3	112.4	151.8	150.6	150.6
85°	39.4	73.0	90.4	88.0	88.0
87.5°	15.1	30.1	32.4	32.4	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)