

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: P275998

Luminaire Tested: **24CZ2-60HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4850.4 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

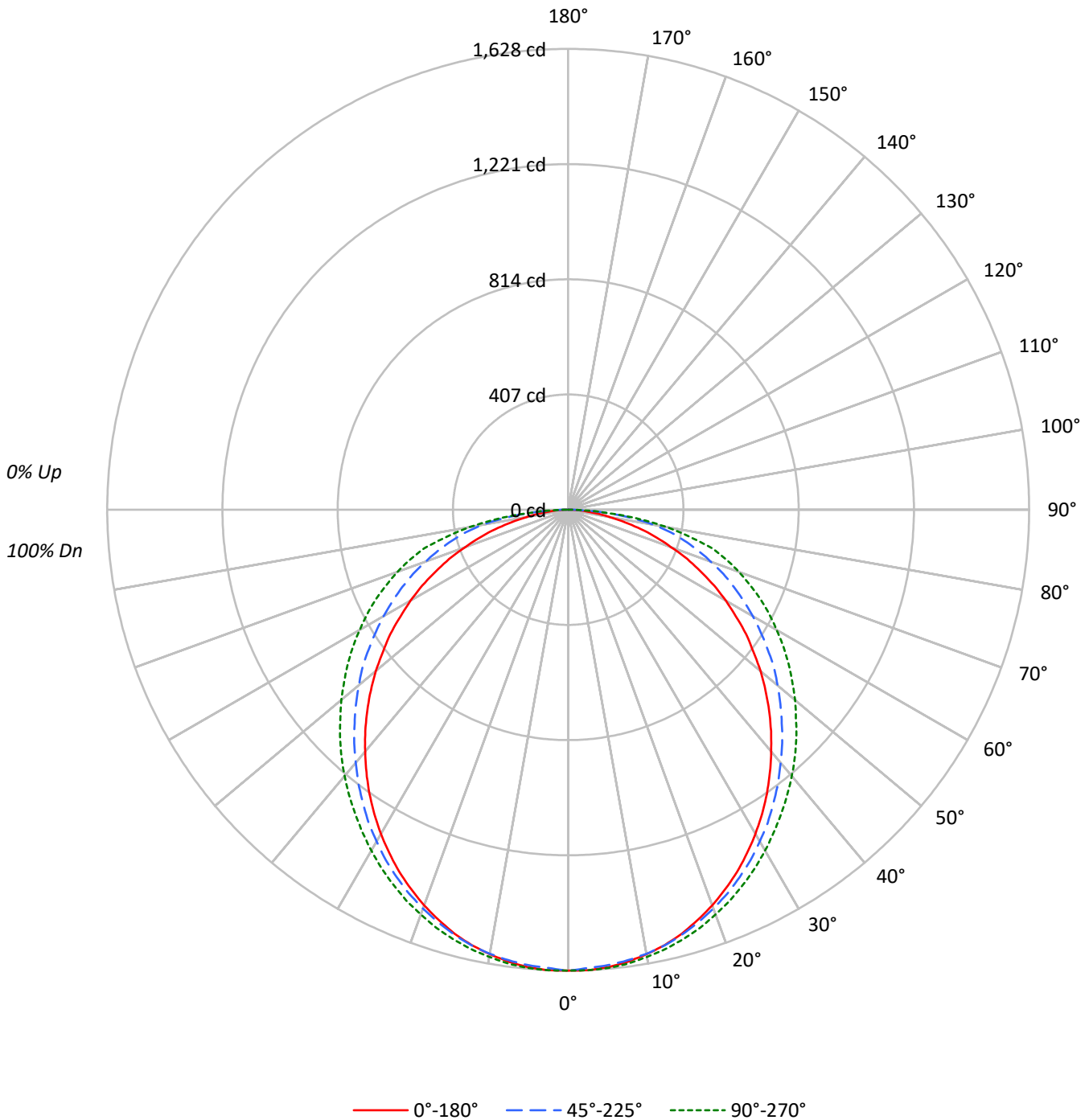
Input Watts (W): 45.109092
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2191	2191	2191
5°	2191	2182	2195
10°	2178	2176	2192
15°	2160	2165	2187
20°	2130	2146	2179
25°	2096	2127	2170
30°	2055	2103	2160
35°	2010	2077	2154
40°	1959	2050	2158
45°	1910	2030	2168
50°	1857	2020	2189
55°	1800	2016	2229
60°	1729	2025	2287
65°	1639	2056	2386
70°	1522	2108	2522
75°	1389	2213	2735
80°	1141	2383	2734
85°	875	2200	2350



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.0	3.2
10°-20°	439.7	9.1
20°-30°	661.7	13.6
30°-40°	793.0	16.3
40°-50°	826.3	17.0
50°-60°	768.8	15.9
60°-70°	633.2	13.1
70°-80°	431.2	8.9
80°-90°	142.4	2.9
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°	1255.4	25.9
0°-40°	2048.4	42.2
0°-60°	3643.5	75.1
0°-90°	4850.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4850.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1622	1622	1616	1624	1625	154
15°	1551	1552	1554	1569	1570	437
25°	1412	1418	1433	1457	1462	650
35°	1224	1238	1264	1298	1311	765
45°	1004	1025	1067	1120	1140	774
55°	767	793	860	928	950	684
65°	515	558	646	722	750	511
75°	267	327	426	502	526	282
85°	57	110	142	152	152	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.5	1628.5	1628.5	1628.5	1628.5
2.5°	1628.5	1628.5	1620.4	1628.5	1628.5
5°	1622.0	1622.0	1615.5	1623.6	1625.2
7.5°	1610.7	1612.3	1605.8	1615.5	1617.2
10°	1594.5	1596.1	1592.9	1602.6	1604.2
12.5°	1575.1	1576.7	1576.7	1588.0	1589.6
15°	1550.8	1552.4	1554.0	1568.6	1570.2
17.5°	1520.0	1524.9	1528.1	1545.9	1549.2
20°	1487.6	1492.5	1499.0	1518.4	1521.6
22.5°	1450.4	1456.9	1468.2	1489.3	1494.1
25°	1411.6	1418.0	1432.6	1456.9	1461.7
27.5°	1367.9	1377.6	1395.4	1421.3	1427.8
30°	1322.5	1332.2	1353.3	1380.8	1390.5
32.5°	1274.0	1286.9	1311.2	1342.0	1351.7
35°	1223.8	1238.4	1264.3	1298.3	1311.2
37.5°	1170.4	1186.6	1217.3	1254.5	1270.7
40°	1115.3	1134.8	1167.1	1210.8	1228.6
42.5°	1060.3	1078.1	1118.6	1165.5	1184.9
45°	1003.6	1024.7	1066.8	1120.2	1139.6
47.5°	945.4	966.4	1016.6	1073.2	1091.1
50°	887.1	908.1	964.8	1024.7	1045.7
52.5°	824.0	851.5	916.2	976.1	997.2
55°	767.3	793.2	859.6	927.6	950.2
57.5°	702.5	733.3	806.1	877.4	901.7
60°	642.7	675.0	752.7	825.6	849.9
62.5°	581.1	616.8	699.3	773.8	801.3
65°	514.8	558.5	645.9	722.0	749.5
67.5°	454.9	500.2	592.5	670.2	694.5
70°	386.9	441.9	535.8	613.5	641.0
72.5°	328.6	383.6	482.4	558.5	586.0
75°	267.1	327.0	425.7	501.8	526.1
77.5°	205.6	272.0	370.7	429.0	437.1
80°	147.3	216.9	307.6	341.6	352.9
82.5°	103.6	166.7	226.6	249.3	255.8
85°	56.7	110.1	142.5	152.2	152.2
87.5°	24.3	46.9	56.7	58.3	59.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)