

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: P276003

Luminaire Tested: **24CZ2-65HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276003
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: 24CZ2-65HE-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: 5255.6 lumens
Efficiency: N/A
Efficacy: 105.4 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

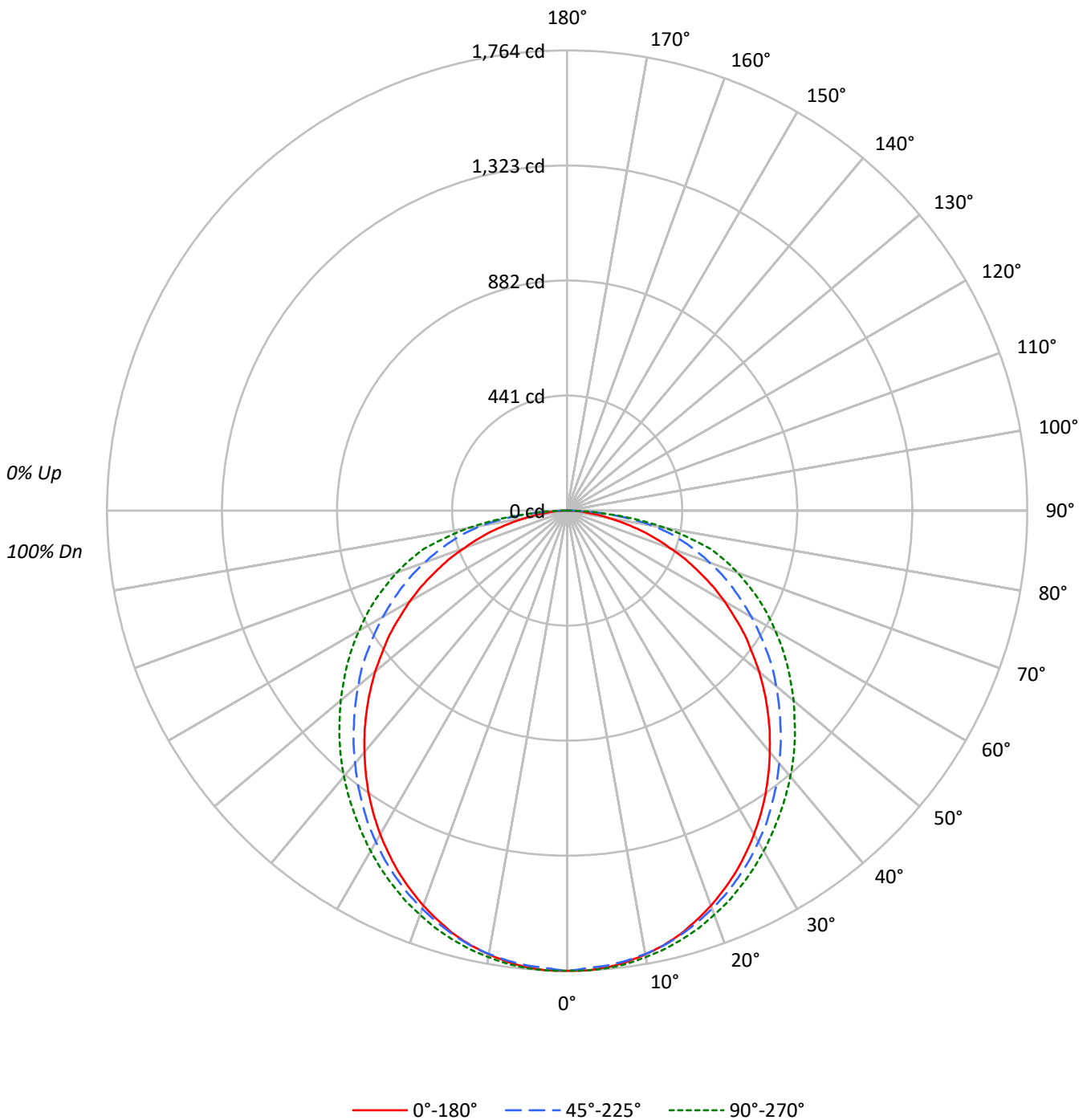
Input Watts (W): 49.847442
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2374	2374	2374
5°	2374	2364	2378
10°	2360	2358	2375
15°	2341	2346	2370
20°	2308	2326	2361
25°	2271	2305	2351
30°	2226	2278	2341
35°	2178	2250	2334
40°	2123	2221	2338
45°	2069	2199	2350
50°	2012	2188	2372
55°	1950	2185	2415
60°	1874	2195	2478
65°	1776	2228	2585
70°	1649	2284	2733
75°	1504	2398	2964
80°	1237	2583	2963
85°	948	2384	2546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	3.2
10°-20°	476.4	9.1
20°-30°	717.0	13.6
30°-40°	859.2	16.3
40°-50°	895.4	17.0
50°-60°	833.1	15.9
60°-70°	686.1	13.1
70°-80°	467.3	8.9
80°-90°	154.3	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°	1360.3	25.9
0°-40°	2219.5	42.2
0°-60°	3947.9	75.1
0°-90°	5255.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5255.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1764	1764	1764	1764	1764	
5°	1758	1758	1750	1759	1761	167
15°	1680	1682	1684	1700	1701	473
25°	1530	1536	1552	1579	1584	704
35°	1326	1342	1370	1407	1421	829
45°	1088	1110	1156	1214	1235	839
55°	831	860	931	1005	1030	741
65°	558	605	700	782	812	554
75°	289	354	461	544	570	305
85°	61	119	154	165	165	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1764.5	1764.5	1764.5	1764.5	1764.5
2.5°	1764.5	1764.5	1755.8	1764.5	1764.5
5°	1757.5	1757.5	1750.5	1759.3	1761.0
7.5°	1745.3	1747.0	1740.0	1750.5	1752.3
10°	1727.7	1729.5	1726.0	1736.5	1738.2
12.5°	1706.7	1708.4	1708.4	1720.7	1722.5
15°	1680.4	1682.1	1683.9	1699.6	1701.4
17.5°	1647.0	1652.3	1655.8	1675.1	1678.6
20°	1611.9	1617.2	1624.2	1645.3	1648.8
22.5°	1571.6	1578.6	1590.9	1613.7	1619.0
25°	1529.5	1536.5	1552.3	1578.6	1583.9
27.5°	1482.2	1492.7	1512.0	1540.0	1547.0
30°	1433.0	1443.6	1466.4	1496.2	1506.7
32.5°	1380.4	1394.4	1420.8	1454.1	1464.6
35°	1326.0	1341.8	1369.9	1406.7	1420.8
37.5°	1268.2	1285.7	1319.0	1359.4	1376.9
40°	1208.5	1229.6	1264.7	1312.0	1331.3
42.5°	1148.9	1168.2	1212.0	1262.9	1283.9
45°	1087.5	1110.3	1155.9	1213.8	1234.8
47.5°	1024.4	1047.2	1101.5	1162.9	1182.2
50°	961.2	984.0	1045.4	1110.3	1133.1
52.5°	892.8	922.6	992.8	1057.7	1080.5
55°	831.4	859.5	931.4	1005.1	1029.6
57.5°	761.2	794.6	873.5	950.7	977.0
60°	696.3	731.4	815.6	894.6	920.9
62.5°	629.7	668.3	757.7	838.4	868.2
65°	557.8	605.1	699.9	782.3	812.1
67.5°	492.9	542.0	642.0	726.2	752.5
70°	419.2	478.8	580.6	664.8	694.6
72.5°	356.1	415.7	522.7	605.1	635.0
75°	289.4	354.3	461.3	543.7	570.1
77.5°	222.8	294.7	401.7	464.8	473.6
80°	159.6	235.0	333.3	370.1	382.4
82.5°	112.3	180.7	245.6	270.1	277.1
85°	61.4	119.3	154.4	164.9	164.9
87.5°	26.3	50.9	61.4	63.1	64.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)