

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: P276532

Luminaire Tested: **24CZ2-65HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276532
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: 24CZ2-65HE-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: 6773.1 lumens
Efficiency: N/A
Efficacy: 134.6 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

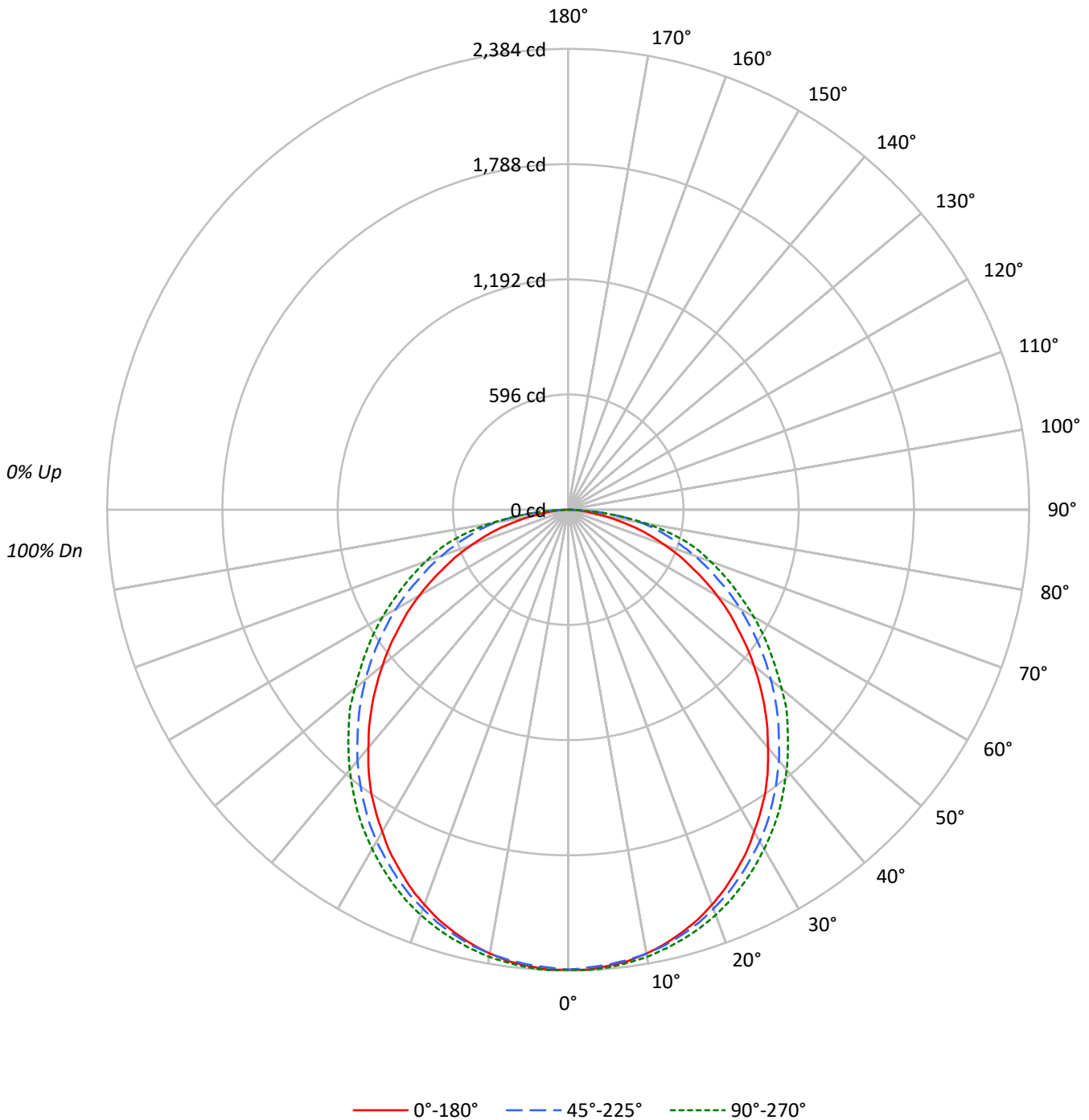
Input Watts (W): 50.313
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276532

CATALOG NUMBER: 24CZ2-65HE-S-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P276532

CATALOG NUMBER: 24CZ2-65HE-S-UNV-L82765-W2A1-U-5700K

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°	3201	3201	3201
5°	3199	3190	3211
10°	3186	3186	3210
15°	3156	3171	3204
20°	3114	3145	3194
25°	3057	3114	3175
30°	2988	3078	3149
35°	2922	3028	3124
40°	2823	2978	3087
45°	2731	2919	3054
50°	2626	2864	3017
55°	2508	2811	2988
60°	2391	2767	2982
65°	2240	2719	3000
70°	2074	2734	3081
75°	1856	2785	3255
80°	1500	2951	3184
85°	1129	2590	2524



TEST NUMBER: P276532

CATALOG NUMBER: 24CZ2-65HE-S-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.3	3.3
10°-20°	643.7	9.5
20°-30°	967.6	14.3
30°-40°	1152.5	17.0
40°-50°	1179.5	17.4
50°-60°	1061.9	15.7
60°-70°	834.0	12.3
70°-80°	541.3	8.0
80°-90°	167.4	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°	1836.5	27.1
0°-40°	2989.0	44.1
0°-60°	5230.5	77.2
0°-90°	6773.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6773.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2379	2379	2379	2379	2379	
5°	2369	2373	2362	2375	2377	225
15°	2265	2272	2276	2296	2300	639
25°	2059	2076	2098	2132	2138	948
35°	1779	1801	1844	1889	1902	1110
45°	1435	1469	1534	1592	1605	1106
55°	1069	1117	1198	1261	1274	959
65°	704	757	854	925	942	700
75°	357	426	536	609	626	378
85°	73	136	168	164	164	88
90°	0	0	0	0	0	



TEST NUMBER: P276532

CATALOG NUMBER: 24CZ2-65HE-S-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2379.4	2379.4	2379.4	2379.4	2379.4
2.5°	2381.6	2381.6	2370.8	2381.6	2383.7
5°	2368.7	2373.0	2362.2	2375.1	2377.3
7.5°	2355.8	2355.8	2349.3	2362.2	2364.4
10°	2332.1	2334.2	2332.1	2347.2	2349.3
12.5°	2302.0	2306.3	2308.4	2323.5	2325.6
15°	2265.4	2271.9	2276.2	2295.5	2299.8
17.5°	2224.5	2231.0	2241.7	2263.3	2267.6
20°	2175.0	2183.7	2196.6	2224.5	2231.0
22.5°	2121.3	2129.9	2151.4	2177.2	2188.0
25°	2058.9	2076.1	2097.6	2132.0	2138.5
27.5°	1996.5	2011.5	2039.5	2076.1	2084.7
30°	1923.3	1947.0	1981.4	2018.0	2026.6
32.5°	1852.3	1876.0	1916.9	1955.6	1966.4
35°	1779.2	1800.7	1843.7	1888.9	1901.8
37.5°	1695.3	1723.3	1770.6	1815.8	1828.7
40°	1607.1	1641.5	1695.3	1742.6	1757.7
42.5°	1523.2	1559.8	1613.5	1665.2	1682.4
45°	1435.0	1469.4	1533.9	1592.0	1604.9
47.5°	1344.6	1383.3	1452.2	1510.3	1531.8
50°	1254.3	1295.1	1368.3	1428.5	1441.4
52.5°	1163.9	1206.9	1284.4	1348.9	1355.4
55°	1069.2	1116.6	1198.3	1260.7	1273.6
57.5°	983.2	1024.1	1112.3	1176.8	1191.9
60°	888.5	933.7	1028.4	1088.6	1108.0
62.5°	798.2	845.5	944.5	1004.7	1021.9
65°	703.5	757.3	854.1	925.1	942.3
67.5°	621.7	673.4	776.6	845.5	862.7
70°	527.1	585.2	694.9	765.9	783.1
72.5°	445.3	505.6	615.3	684.1	710.0
75°	357.1	426.0	535.7	608.8	626.1
77.5°	271.1	350.7	462.5	518.5	518.5
80°	193.6	277.5	380.8	406.6	410.9
82.5°	126.9	208.7	281.8	279.7	279.7
85°	73.1	135.5	167.8	163.5	163.5
87.5°	28.0	55.9	60.2	60.2	58.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)