

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: P277393

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2434.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

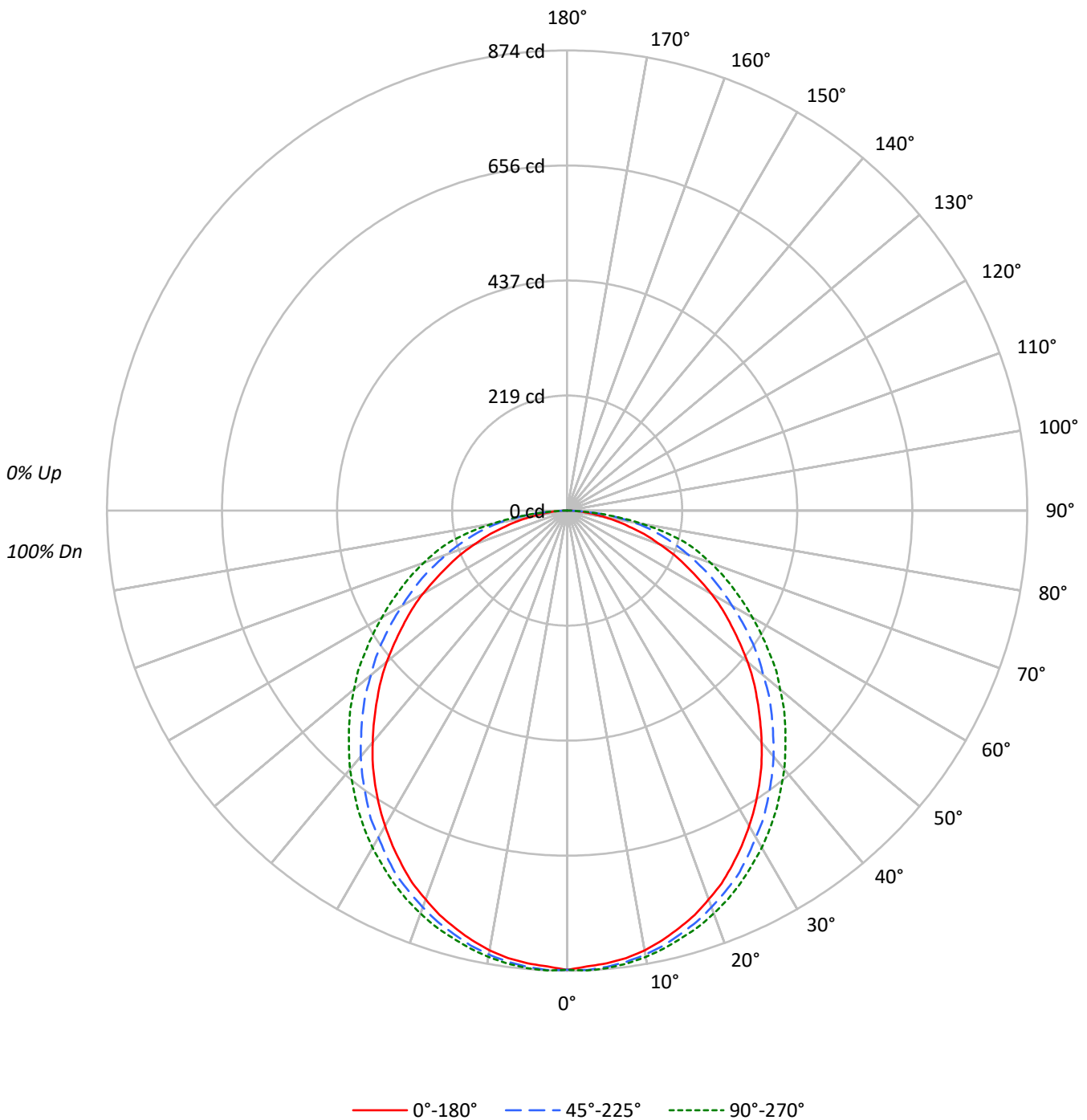
Input Watts (W): 17.949
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277393

CATALOG NUMBER: 22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P277393

CATALOG NUMBER: 22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K

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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2347	2347	2347
5°	2331	2350	2356
10°	2318	2340	2352
15°	2288	2319	2341
20°	2251	2296	2332
25°	2205	2273	2317
30°	2149	2227	2297
35°	2089	2186	2276
40°	2018	2142	2254
45°	1945	2092	2230
50°	1873	2035	2211
55°	1785	1998	2195
60°	1705	1950	2188
65°	1591	1938	2213
70°	1465	1921	2279
75°	1323	1948	2397
80°	1144	2007	2253
85°	948	1683	1683



TEST NUMBER: P277393

CATALOG NUMBER: 22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	3.4
10°-20°	234.7	9.6
20°-30°	351.2	14.4
30°-40°	415.9	17.1
40°-50°	423.9	17.4
50°-60°	379.9	15.6
60°-70°	297.4	12.2
70°-80°	191.8	7.9
80°-90°	56.7	2.3
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°	668.4	27.5
0°-40°	1084.3	44.5
0°-60°	1888.1	77.6
0°-90°	2434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	863	865	870	871	872	82
15°	821	826	832	839	840	231
25°	743	750	765	776	780	342
35°	636	644	666	686	693	397
45°	511	522	550	578	586	395
55°	380	393	426	455	468	341
65°	250	265	304	334	348	248
75°	127	146	187	219	230	136
85°	31	42	54	54	54	36
90°	0	0	0	0	0	



TEST NUMBER: P277393

CATALOG NUMBER: 22CZ2-24HE-S-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	872.2	872.2	872.2	872.2	872.2
2.5°	866.5	868.8	873.3	874.4	874.4
5°	863.1	865.4	869.9	871.0	872.2
7.5°	857.4	858.6	864.2	866.5	867.6
10°	848.3	850.6	856.3	859.7	860.8
12.5°	835.8	839.2	846.1	850.6	851.7
15°	821.1	825.6	832.4	839.2	840.4
17.5°	805.2	809.7	818.8	826.8	829.0
20°	785.9	791.5	801.8	810.9	814.3
22.5°	766.6	771.1	783.6	795.0	798.4
25°	742.7	749.5	765.4	775.6	780.2
27.5°	717.7	725.7	741.6	755.2	759.7
30°	691.6	699.6	716.6	733.6	739.3
32.5°	664.4	673.4	693.9	710.9	716.6
35°	636.0	643.9	665.5	685.9	692.7
37.5°	606.4	613.3	638.2	659.8	666.6
40°	574.6	583.7	609.8	634.8	641.6
42.5°	542.8	553.1	579.2	606.4	613.3
45°	511.0	522.4	549.7	578.0	586.0
47.5°	480.4	489.5	520.1	547.4	558.7
50°	447.4	456.5	486.1	516.7	528.1
52.5°	413.4	425.9	457.7	487.2	500.8
55°	380.4	392.9	425.9	455.4	467.9
57.5°	349.8	360.0	394.1	424.7	437.2
60°	316.8	325.9	362.3	395.2	406.6
62.5°	281.6	295.3	332.7	363.4	377.0
65°	249.8	264.6	304.4	333.9	347.5
67.5°	220.3	233.9	272.6	304.4	319.1
70°	186.2	204.4	244.2	276.0	289.6
72.5°	159.0	174.9	215.8	247.6	262.3
75°	127.2	146.5	187.4	219.2	230.5
77.5°	101.1	120.4	159.0	184.0	189.7
80°	73.8	93.1	129.5	142.0	145.4
82.5°	50.0	68.1	93.1	96.5	97.7
85°	30.7	42.0	54.5	54.5	54.5
87.5°	14.8	17.0	19.3	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)