

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: P474840

Luminaire Tested: **22CZ2-75VHE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474840
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-75VHE-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

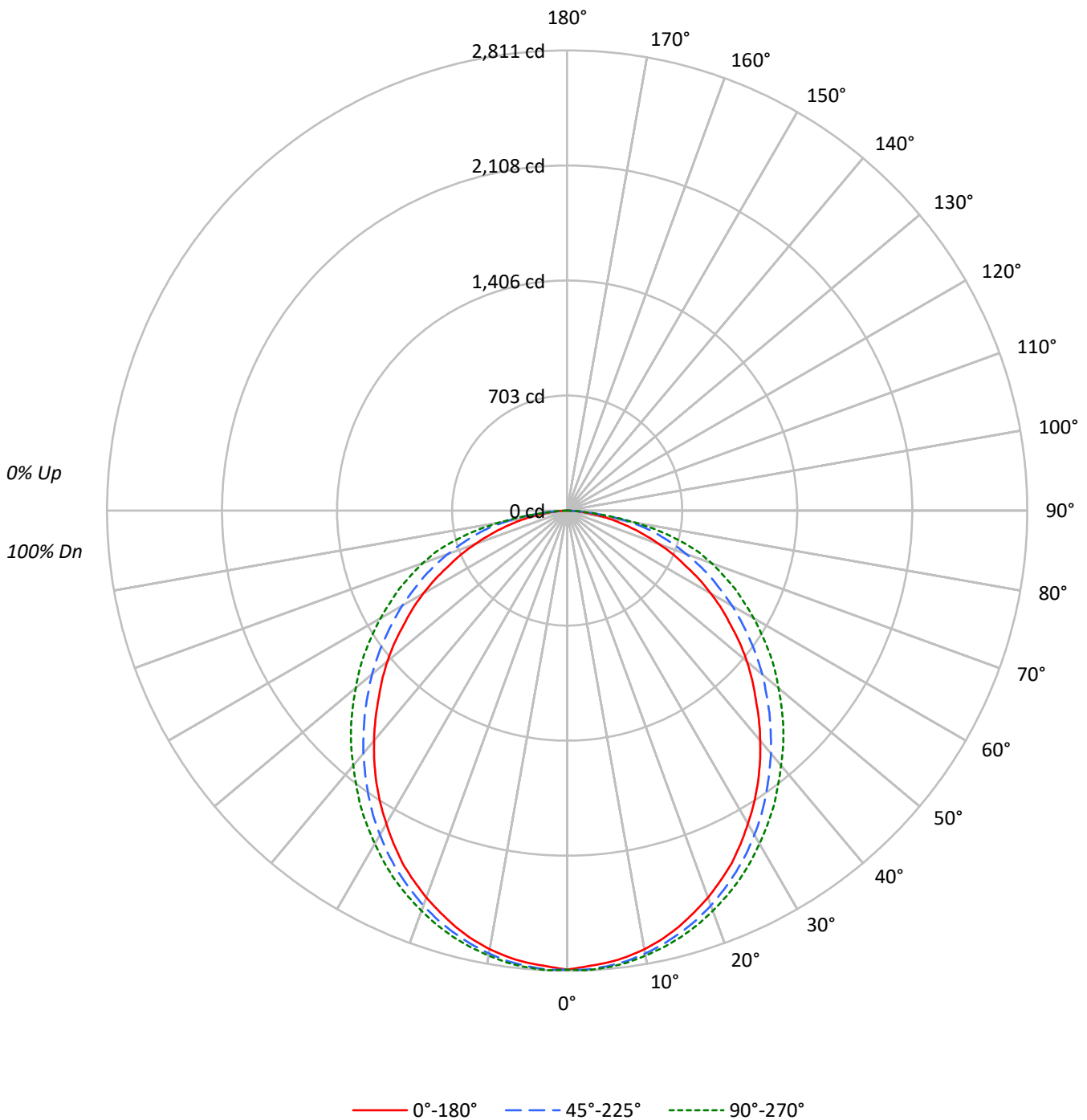
Lumens per Lamp: N/A
Luminaire Lumens: 7732.9 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 55.2
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: P474840
CATALOG NUMBER: 22CZ2-75VHE-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474840

CATALOG NUMBER: 22CZ2-75VHE-UNV-L840-CD1-U

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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7546	7546	7546
5°	7491	7549	7566
10°	7435	7506	7542
15°	7334	7439	7508
20°	7202	7352	7450
25°	7060	7240	7390
30°	6866	7109	7302
35°	6673	6958	7231
40°	6447	6803	7142
45°	6200	6648	7109
50°	6000	6513	7054
55°	5720	6371	7069
60°	5462	6262	7089
65°	5078	6181	7201
70°	4693	6094	7380
75°	4197	6066	7426
80°	3521	5749	6484
85°	2723	3937	3683



TEST NUMBER: P474840

CATALOG NUMBER: 22CZ2-75VHE-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.9	3.4
10°-20°	752.1	9.7
20°-30°	1121.5	14.5
30°-40°	1323.9	17.1
40°-50°	1349.3	17.4
50°-60°	1216.8	15.7
60°-70°	956.4	12.4
70°-80°	598.8	7.7
80°-90°	149.3	1.9
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°	2138.5	27.7
0°-40°	3462.4	44.8
0°-60°	6028.4	78.0
0°-90°	7732.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7732.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2804	2804	2804	2804	2804	
5°	2773	2780	2794	2801	2801	263
15°	2633	2644	2670	2690	2695	742
25°	2378	2396	2438	2476	2489	1093
35°	2031	2058	2118	2177	2201	1269
45°	1629	1665	1747	1832	1868	1260
55°	1219	1257	1358	1463	1507	1094
65°	798	846	971	1079	1131	795
75°	404	464	583	688	714	429
85°	88	113	128	128	119	106
90°	0	0	0	0	0	



TEST NUMBER: P474840

CATALOG NUMBER: 22CZ2-75VHE-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2804.3	2804.3	2804.3	2804.3	2804.3
2.5°	2786.4	2792.9	2806.0	2810.9	2810.9
5°	2773.3	2779.8	2794.5	2801.1	2801.1
7.5°	2752.0	2758.6	2776.6	2784.7	2786.4
10°	2721.0	2729.2	2747.1	2760.2	2760.2
12.5°	2681.8	2689.9	2712.8	2729.2	2730.8
15°	2632.7	2644.2	2670.3	2689.9	2694.9
17.5°	2575.6	2593.5	2622.9	2647.5	2652.4
20°	2515.1	2533.1	2567.4	2595.2	2601.7
22.5°	2448.1	2464.4	2505.3	2539.6	2547.8
25°	2377.8	2395.8	2438.3	2475.9	2488.9
27.5°	2294.5	2315.7	2366.4	2408.9	2421.9
30°	2209.5	2235.6	2287.9	2335.3	2350.0
32.5°	2122.9	2147.4	2206.2	2256.9	2276.5
35°	2031.4	2057.5	2118.0	2176.8	2201.3
37.5°	1934.9	1961.1	2026.4	2093.5	2116.3
40°	1835.2	1866.3	1936.6	2008.5	2033.0
42.5°	1733.9	1766.6	1840.1	1920.2	1952.9
45°	1629.3	1665.3	1747.0	1832.0	1867.9
47.5°	1534.5	1564.0	1648.9	1742.1	1776.4
50°	1433.2	1461.0	1555.8	1648.9	1684.9
52.5°	1330.3	1356.4	1457.7	1555.8	1599.9
55°	1219.1	1256.7	1358.0	1462.6	1506.8
57.5°	1121.1	1155.4	1260.0	1366.2	1408.7
60°	1014.9	1050.8	1163.6	1271.4	1317.2
62.5°	908.6	947.9	1062.3	1178.3	1220.8
65°	797.5	846.5	970.7	1078.6	1130.9
67.5°	702.7	750.1	872.7	985.4	1031.2
70°	596.5	652.1	774.6	889.0	938.0
72.5°	496.8	552.4	678.2	792.6	841.6
75°	403.7	464.1	583.4	688.0	714.2
77.5°	313.8	371.0	490.3	550.7	578.5
80°	227.2	282.7	371.0	411.8	418.4
82.5°	153.6	201.0	251.7	263.1	256.6
85°	88.2	112.8	127.5	127.5	119.3
87.5°	36.0	36.0	31.1	19.6	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)