

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: P474589

Luminaire Tested: **24CZ2-75VHE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474589
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6866.0 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

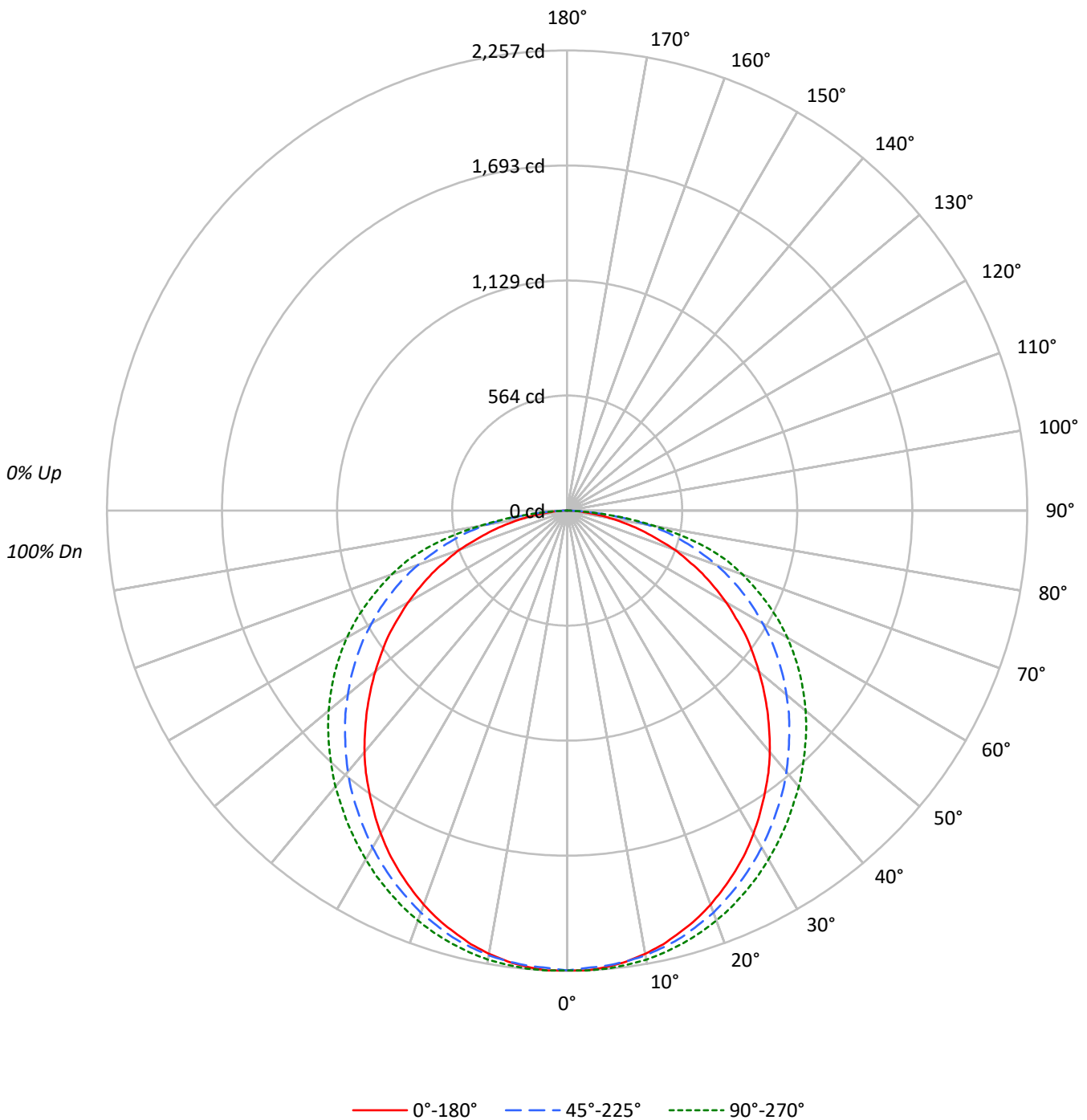
Input Watts (W): 51.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	53	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	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
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	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6069	6069	6069
5°	6068	6051	6092
10°	6031	6052	6111
15°	5965	6038	6121
20°	5890	6009	6129
25°	5794	5967	6130
30°	5682	5931	6138
35°	5553	5895	6162
40°	5433	5876	6211
45°	5285	5861	6278
50°	5143	5878	6392
55°	5023	5918	6536
60°	4853	5963	6718
65°	4658	6034	6921
70°	4419	6119	7198
75°	3957	6204	7436
80°	3332	6222	6749
85°	2473	4709	4437



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.7	3.1
10°-20°	612.5	8.9
20°-30°	927.2	13.5
30°-40°	1121.6	16.3
40°-50°	1184.0	17.2
50°-60°	1116.5	16.3
60°-70°	920.5	13.4
70°-80°	603.9	8.8
80°-90°	166.0	2.4
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°	1753.4	25.5
0°-40°	2875.1	41.9
0°-60°	5175.6	75.4
0°-90°	6866.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2255	2255	2255	2255	2255	
5°	2246	2246	2240	2255	2255	213
15°	2141	2153	2168	2193	2197	604
25°	1951	1976	2010	2051	2064	899
35°	1690	1734	1794	1856	1876	1058
45°	1389	1451	1540	1622	1650	1072
55°	1071	1146	1261	1356	1393	954
65°	732	819	948	1049	1087	722
75°	381	478	597	691	715	402
85°	80	138	152	148	144	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2255.2	2255.2	2255.2	2255.2	2255.2
2.5°	2257.4	2255.2	2245.4	2258.5	2257.4
5°	2246.5	2246.5	2239.9	2255.2	2255.2
7.5°	2231.1	2232.2	2230.0	2247.6	2247.6
10°	2207.0	2211.4	2214.7	2234.4	2236.6
12.5°	2178.5	2186.1	2192.7	2216.8	2219.0
15°	2141.2	2153.2	2167.5	2192.7	2197.1
17.5°	2102.8	2117.0	2132.4	2165.3	2170.8
20°	2056.7	2073.2	2098.4	2131.3	2140.1
22.5°	2005.1	2028.2	2054.5	2094.0	2105.0
25°	1951.4	1975.5	2009.5	2051.2	2064.4
27.5°	1893.3	1921.8	1960.2	2008.4	2022.7
30°	1828.5	1861.5	1908.6	1960.2	1975.5
32.5°	1760.5	1798.9	1851.6	1908.6	1926.2
35°	1690.3	1734.2	1794.5	1856.0	1875.7
37.5°	1621.2	1665.1	1736.4	1801.1	1819.8
40°	1546.6	1594.9	1672.8	1741.9	1768.2
42.5°	1467.7	1524.7	1607.0	1683.8	1709.0
45°	1388.7	1451.2	1540.1	1622.3	1649.7
47.5°	1308.6	1377.7	1475.3	1558.7	1590.5
50°	1228.5	1302.0	1404.0	1494.0	1526.9
52.5°	1147.4	1224.1	1334.9	1430.4	1460.0
55°	1070.6	1146.3	1261.4	1355.8	1393.1
57.5°	981.7	1067.3	1189.0	1284.5	1320.7
60°	901.7	985.0	1107.9	1208.8	1248.3
62.5°	815.0	900.6	1030.0	1130.9	1169.3
65°	731.6	819.4	947.7	1048.6	1087.0
67.5°	641.7	733.8	865.5	963.1	1000.4
70°	561.6	648.3	777.7	877.5	914.8
72.5°	464.0	562.7	686.7	785.4	826.0
75°	380.6	478.3	596.7	691.1	715.2
77.5°	292.9	390.5	507.9	569.3	585.7
80°	215.0	307.1	401.5	434.4	435.5
82.5°	144.8	226.0	279.7	296.2	294.0
85°	80.1	138.2	152.5	148.1	143.7
87.5°	32.9	46.1	37.3	26.3	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)