

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: P474773

Luminaire Tested: **22CZ2-24VHE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474773
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2333.2 lumens
Efficiency: N/A
Efficacy: 141.4 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

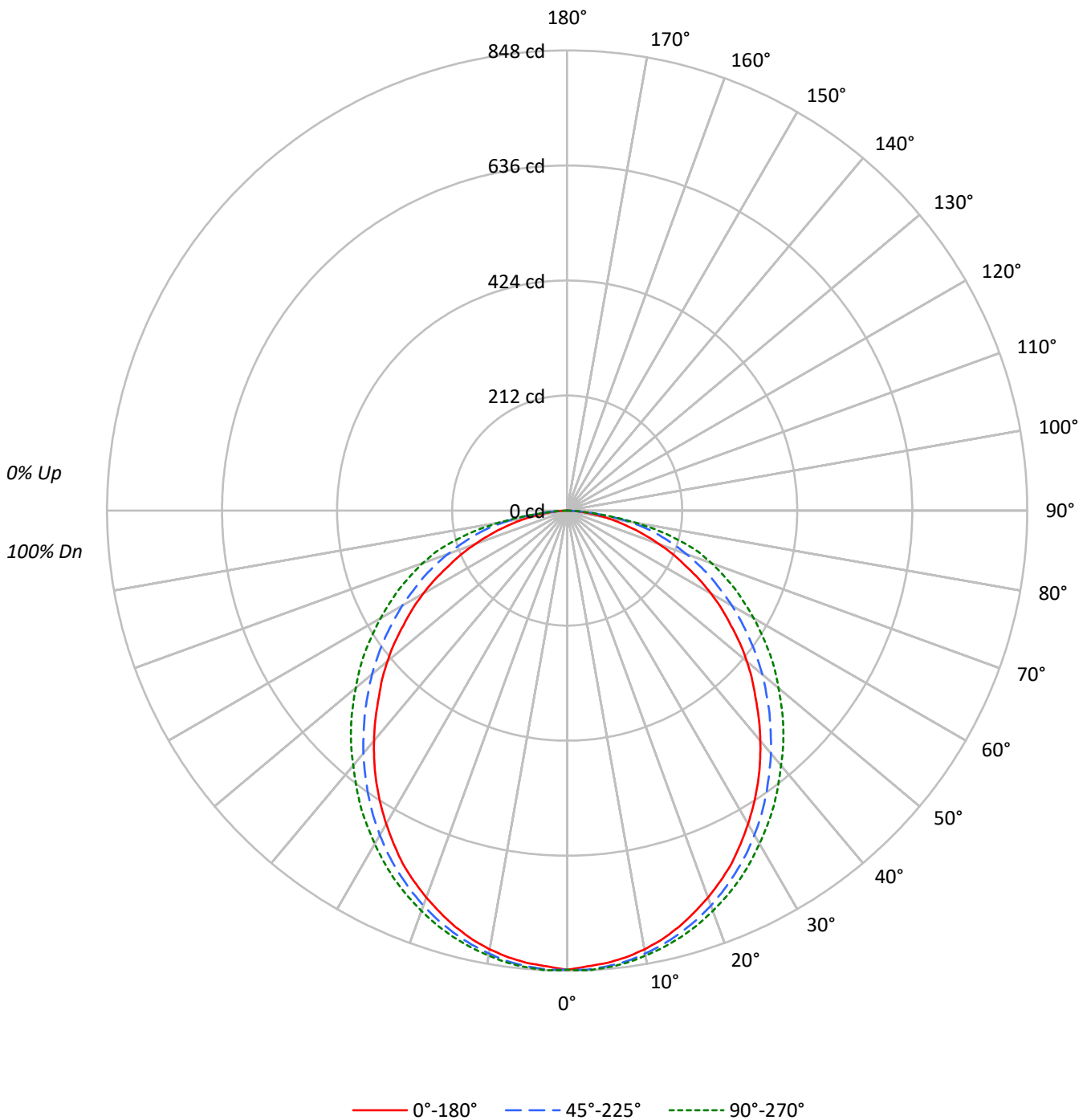
Input Watts (W): 16.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2277	2277	2277
5°	2260	2278	2283
10°	2243	2265	2276
15°	2213	2245	2265
20°	2173	2218	2248
25°	2130	2184	2230
30°	2072	2145	2203
35°	2013	2099	2182
40°	1945	2053	2155
45°	1871	2006	2145
50°	1811	1965	2128
55°	1726	1923	2133
60°	1648	1890	2139
65°	1532	1865	2173
70°	1416	1839	2227
75°	1266	1830	2241
80°	1062	1734	1956
85°	821	1189	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	3.4
10°-20°	226.9	9.7
20°-30°	338.4	14.5
30°-40°	399.5	17.1
40°-50°	407.1	17.4
50°-60°	367.1	15.7
60°-70°	288.5	12.4
70°-80°	180.7	7.7
80°-90°	45.1	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°	645.3	27.7
0°-40°	1044.7	44.8
0°-60°	1819.0	78.0
0°-90°	2333.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2333.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	837	839	843	845	845	79
15°	794	798	806	812	813	224
25°	718	723	736	747	751	330
35°	613	621	639	657	664	383
45°	492	502	527	553	564	380
55°	368	379	410	441	455	330
65°	241	255	293	325	341	240
75°	122	140	176	208	216	129
85°	27	34	38	38	36	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.2	846.2	846.2	846.2	846.2
2.5°	840.7	842.7	846.7	848.1	848.1
5°	836.8	838.8	843.2	845.2	845.2
7.5°	830.4	832.4	837.8	840.2	840.7
10°	821.0	823.5	828.9	832.9	832.9
12.5°	809.2	811.6	818.6	823.5	824.0
15°	794.4	797.8	805.7	811.6	813.1
17.5°	777.1	782.6	791.4	798.8	800.3
20°	758.9	764.3	774.7	783.0	785.0
22.5°	738.7	743.6	755.9	766.3	768.7
25°	717.5	722.9	735.7	747.1	751.0
27.5°	692.3	698.7	714.0	726.8	730.8
30°	666.7	674.6	690.3	704.6	709.1
32.5°	640.5	647.9	665.7	681.0	686.9
35°	612.9	620.8	639.1	656.8	664.2
37.5°	583.8	591.7	611.4	631.7	638.6
40°	553.8	563.1	584.3	606.0	613.4
42.5°	523.2	533.0	555.2	579.4	589.3
45°	491.6	502.5	527.1	552.8	563.6
47.5°	463.0	471.9	497.5	525.6	536.0
50°	432.5	440.8	469.4	497.5	508.4
52.5°	401.4	409.3	439.8	469.4	482.7
55°	367.9	379.2	409.8	441.3	454.6
57.5°	338.3	348.6	380.2	412.2	425.1
60°	306.2	317.1	351.1	383.6	397.4
62.5°	274.2	286.0	320.5	355.5	368.3
65°	240.6	255.4	292.9	325.4	341.2
67.5°	212.0	226.3	263.3	297.3	311.1
70°	180.0	196.7	233.7	268.2	283.0
72.5°	149.9	166.7	204.6	239.2	253.9
75°	121.8	140.0	176.0	207.6	215.5
77.5°	94.7	111.9	147.9	166.2	174.6
80°	68.5	85.3	111.9	124.3	126.2
82.5°	46.4	60.7	75.9	79.4	77.4
85°	26.6	34.0	38.5	38.5	36.0
87.5°	10.8	10.8	9.4	5.9	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)