

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: P475259

Luminaire Tested: **22CZ2-20HE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475259
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1928.6 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

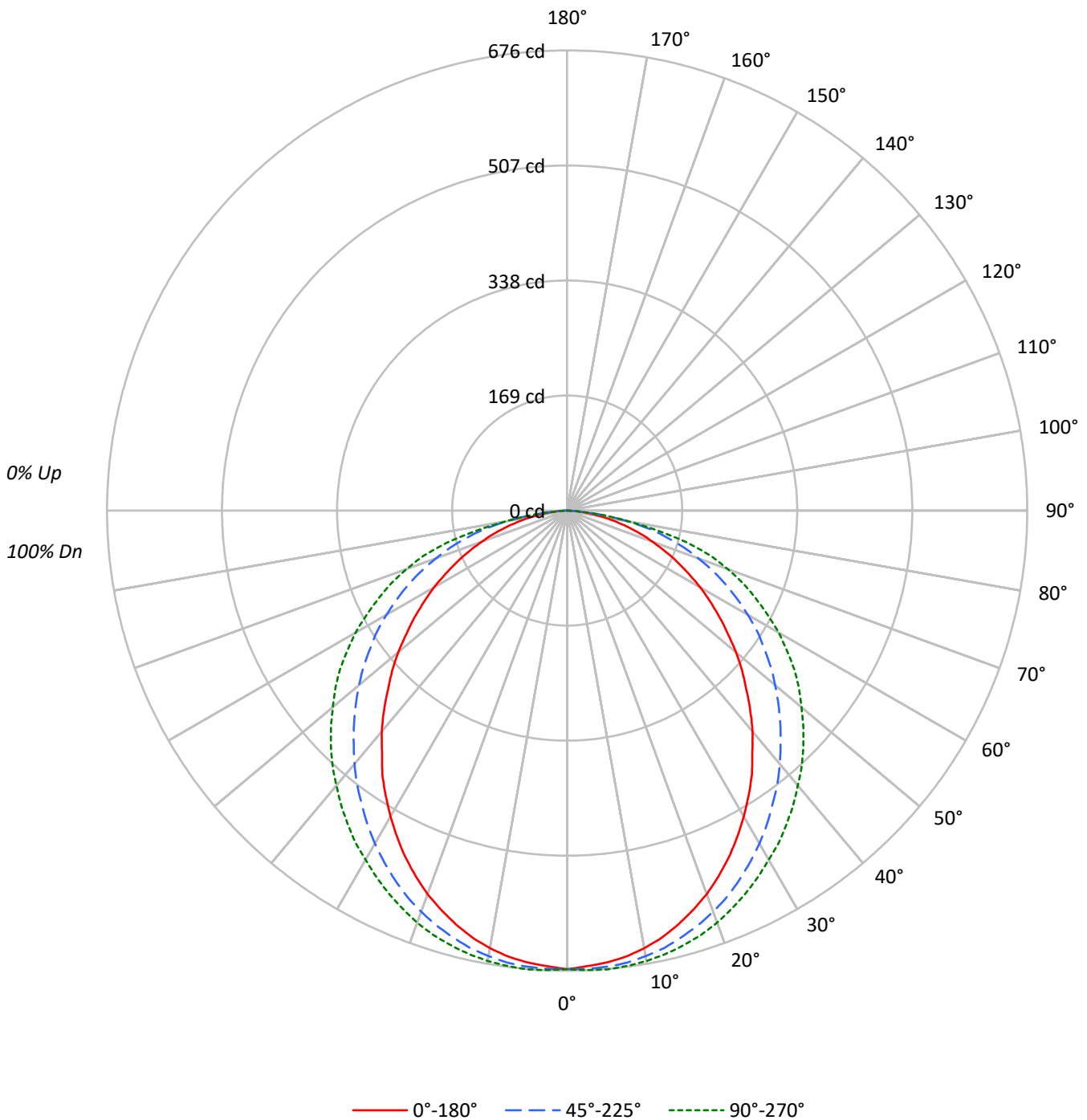
Input Watts (W): 15
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1813	1813	1813
5°	1800	1817	1827
10°	1783	1816	1836
15°	1755	1808	1841
20°	1717	1796	1845
25°	1669	1777	1843
30°	1613	1755	1840
35°	1554	1729	1846
40°	1489	1708	1852
45°	1418	1686	1867
50°	1356	1671	1881
55°	1284	1658	1911
60°	1217	1651	1932
65°	1137	1638	1947
70°	1044	1613	1973
75°	943	1570	1903
80°	809	1390	1433
85°	651	818	651



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	3.3
10°-20°	182.6	9.5
20°-30°	274.3	14.2
30°-40°	327.1	17.0
40°-50°	338.2	17.5
50°-60°	310.9	16.1
60°-70°	247.5	12.8
70°-80°	151.2	7.8
80°-90°	32.9	1.7
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°	520.7	27.0
0°-40°	847.8	44.0
0°-60°	1497.0	77.6
0°-90°	1928.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1928.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	666	668	673	676	676	63
15°	630	637	649	658	661	177
25°	562	576	599	615	621	259
35°	473	493	526	554	562	295
45°	372	399	443	479	491	288
55°	274	304	353	394	407	245
65°	178	209	257	293	306	177
75°	91	117	151	178	183	97
85°	21	26	26	23	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	673.7	673.7	673.7	673.7	673.7
2.5°	670.0	670.9	673.7	675.6	675.6
5°	666.4	668.2	672.7	675.6	676.5
7.5°	660.9	663.6	670.0	673.7	674.7
10°	652.7	656.3	664.5	670.0	671.8
12.5°	642.6	648.0	658.2	665.5	667.3
15°	629.8	637.1	648.9	658.2	660.9
17.5°	615.1	624.2	638.9	650.0	653.6
20°	599.5	608.7	627.1	639.8	644.4
22.5°	581.3	593.1	614.2	628.9	632.5
25°	562.0	575.7	598.6	615.1	620.6
27.5°	541.0	557.5	582.2	602.4	606.9
30°	519.0	536.4	564.8	586.8	592.2
32.5°	496.1	516.3	546.4	571.2	578.6
35°	473.2	493.4	526.3	553.8	562.0
37.5°	446.7	470.5	507.1	535.5	545.5
40°	423.8	446.7	486.1	517.2	527.3
42.5°	398.2	422.9	464.1	497.9	509.9
45°	372.5	399.1	443.0	478.8	490.6
47.5°	348.7	375.3	421.0	458.6	470.5
50°	324.0	351.5	399.1	437.6	449.4
52.5°	297.5	327.7	377.1	415.6	429.4
55°	273.7	303.9	353.3	393.6	407.4
57.5°	249.0	280.1	331.4	369.8	382.7
60°	226.1	256.3	306.7	344.2	358.9
62.5°	201.4	232.5	281.9	318.5	332.3
65°	178.5	208.8	257.2	292.9	305.7
67.5°	155.6	185.9	231.5	265.5	280.1
70°	132.7	163.0	205.0	238.0	250.8
72.5°	112.6	139.2	179.4	209.7	221.5
75°	90.7	117.2	151.0	177.6	183.0
77.5°	70.5	94.3	122.7	134.5	136.4
80°	52.2	70.5	89.7	92.5	92.5
82.5°	34.7	48.5	55.8	56.7	55.8
85°	21.1	25.6	26.5	22.9	21.1
87.5°	7.3	7.3	4.6	2.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)