

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: P475261

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475261
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-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: 2833.0 lumens
Efficiency: N/A
Efficacy: 135.5 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

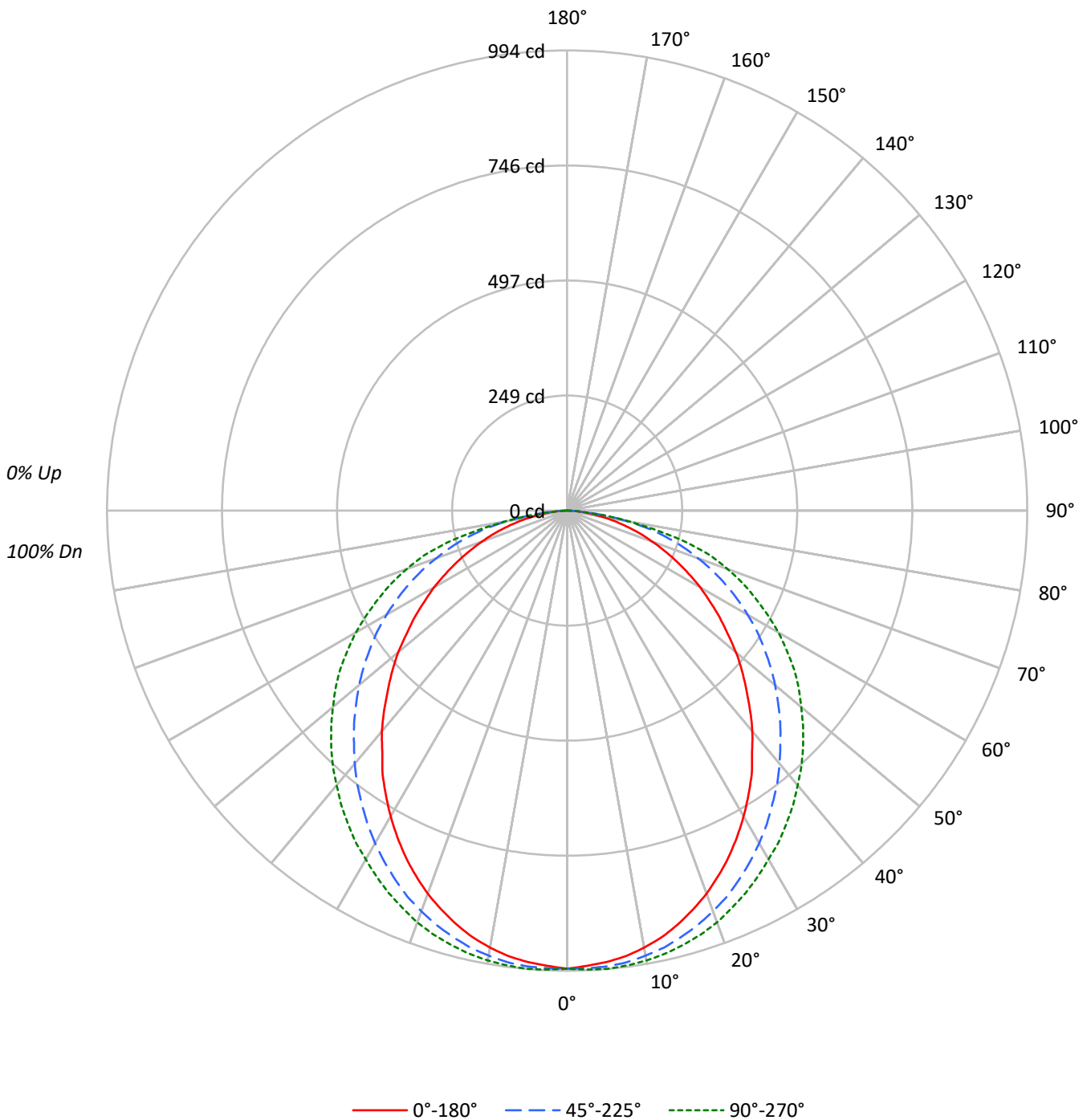
Input Watts (W): 20.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2663	2663	2663
5°	2644	2669	2684
10°	2620	2667	2697
15°	2578	2656	2705
20°	2522	2638	2711
25°	2451	2611	2707
30°	2369	2578	2703
35°	2283	2540	2712
40°	2187	2508	2721
45°	2082	2477	2743
50°	1993	2454	2764
55°	1886	2435	2807
60°	1787	2425	2837
65°	1670	2406	2859
70°	1533	2369	2899
75°	1385	2306	2796
80°	1187	2042	2104
85°	954	1204	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	3.3
10°-20°	268.2	9.5
20°-30°	402.9	14.2
30°-40°	480.5	17.0
40°-50°	496.8	17.5
50°-60°	456.7	16.1
60°-70°	363.6	12.8
70°-80°	222.1	7.8
80°-90°	48.3	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°	764.9	27.0
0°-40°	1245.4	44.0
0°-60°	2199.0	77.6
0°-90°	2833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	990	990	990	990	990	
5°	979	982	988	992	994	93
15°	925	936	953	967	971	261
25°	826	846	879	904	912	380
35°	695	725	773	814	826	434
45°	547	586	651	703	721	423
55°	402	446	519	578	598	360
65°	262	307	378	430	449	260
75°	133	172	222	261	269	142
85°	31	38	39	34	31	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	989.6	989.6	989.6	989.6	989.6
2.5°	984.2	985.6	989.6	992.4	992.4
5°	978.9	981.5	988.2	992.4	993.7
7.5°	970.8	974.9	984.2	989.6	991.1
10°	958.8	964.1	976.2	984.2	986.9
12.5°	943.9	951.9	966.8	977.5	980.2
15°	925.2	935.9	953.3	966.8	970.8
17.5°	903.6	917.0	938.5	954.8	960.1
20°	880.7	894.2	921.1	939.9	946.6
22.5°	853.9	871.3	902.2	923.8	929.2
25°	825.6	845.7	879.3	903.6	911.6
27.5°	794.7	818.9	855.2	884.8	891.5
30°	762.4	788.0	829.6	861.9	870.0
32.5°	728.8	758.4	802.7	839.0	849.9
35°	695.1	724.7	773.1	813.6	825.6
37.5°	656.1	691.1	745.0	786.6	801.4
40°	622.5	656.1	714.0	759.7	774.6
42.5°	584.9	621.2	681.7	731.4	749.0
45°	547.2	586.2	650.8	703.3	720.7
47.5°	512.3	551.3	618.5	673.7	691.1
50°	476.0	516.3	586.2	642.8	660.2
52.5°	437.0	481.3	553.9	610.5	630.7
55°	402.0	446.4	519.0	578.2	598.4
57.5°	365.7	411.4	486.8	543.2	562.1
60°	332.1	376.4	450.5	505.6	527.2
62.5°	295.8	341.5	414.1	467.9	488.2
65°	262.2	306.6	377.8	430.3	449.0
67.5°	228.5	273.0	340.1	390.0	411.4
70°	194.9	239.4	301.1	349.6	368.4
72.5°	165.5	204.4	263.5	308.0	325.4
75°	133.2	172.1	221.8	260.8	268.9
77.5°	103.6	138.5	180.2	197.6	200.4
80°	76.6	103.6	131.8	135.8	135.8
82.5°	51.0	71.3	82.0	83.3	82.0
85°	30.9	37.6	39.0	33.6	30.9
87.5°	10.7	10.7	6.7	4.0	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)