

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: P475145

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475145
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2415.5 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

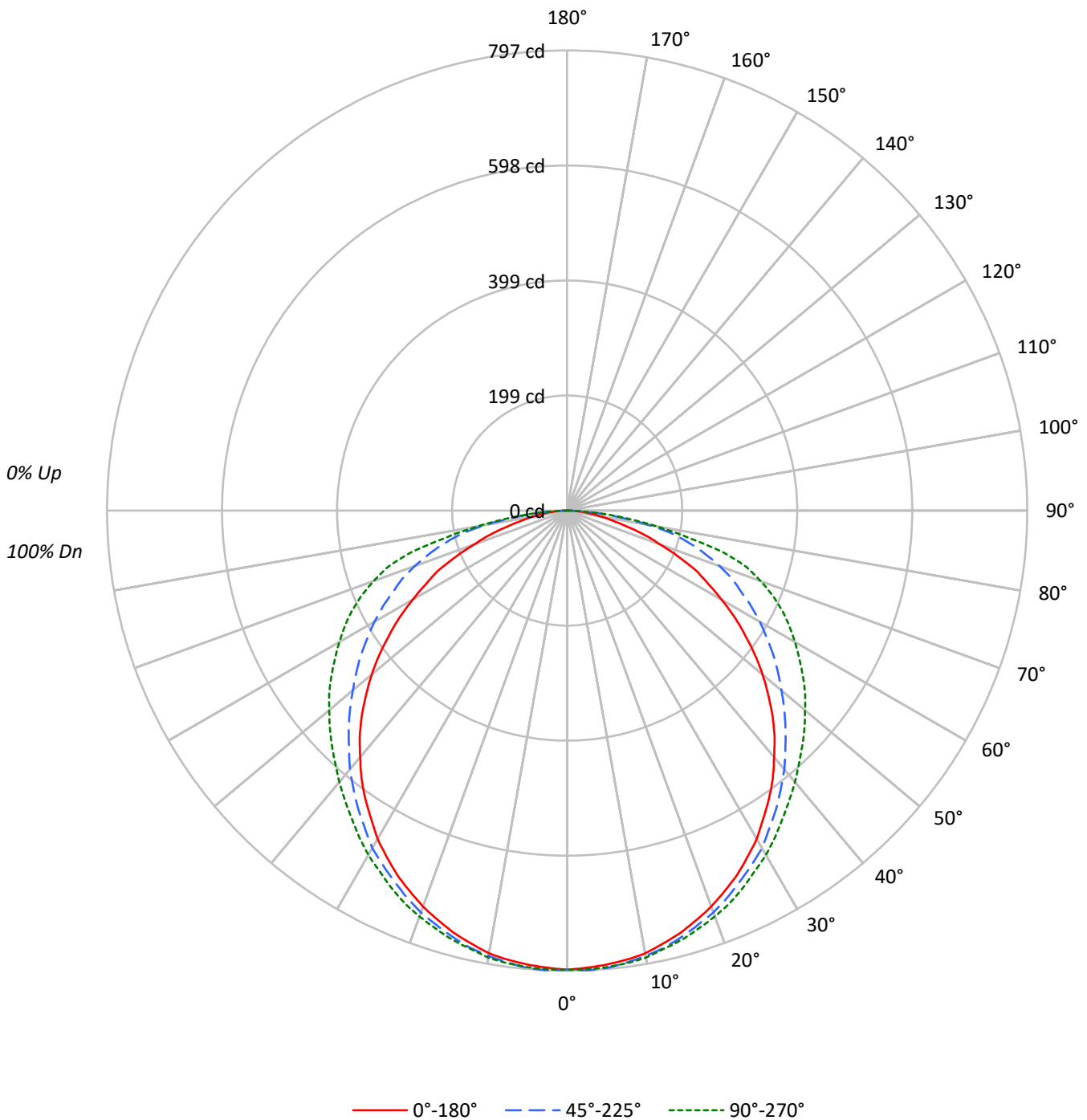
Input Watts (W): 20.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	80	75	84	78	73		80	75	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	52	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°	2140	2140	2140
5°	2132	2148	2145
10°	2128	2140	2149
15°	2110	2131	2144
20°	2090	2121	2142
25°	2068	2104	2140
30°	2041	2097	2140
35°	2002	2073	2138
40°	1959	2055	2157
45°	1914	2036	2192
50°	1850	2029	2252
55°	1765	2045	2338
60°	1665	2075	2452
65°	1572	2115	2620
70°	1343	2206	2806
75°	1125	2298	2915
80°	922	2219	2431
85°	797	1646	1788



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	3.1
10°-20°	215.6	8.9
20°-30°	326.8	13.5
30°-40°	394.6	16.3
40°-50°	414.7	17.2
50°-60°	390.1	16.2
60°-70°	325.3	13.5
70°-80°	215.5	8.9
80°-90°	57.4	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°	617.8	25.6
0°-40°	1012.4	41.9
0°-60°	1817.3	75.2
0°-90°	2415.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2415.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	789	791	795	795	794	75
15°	757	760	765	768	770	214
25°	696	701	708	718	721	321
35°	610	616	631	645	651	381
45°	503	510	535	562	576	387
55°	376	393	436	480	498	337
65°	247	268	332	387	412	240
75°	108	151	221	267	280	117
85°	26	40	53	58	58	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	795.3	795.3	795.3	795.3	795.3
2.5°	792.4	793.9	797.0	797.0	795.3
5°	789.3	790.8	795.3	795.3	793.9
7.5°	784.7	786.3	789.3	792.4	790.8
10°	778.7	780.1	783.2	786.3	786.3
12.5°	768.0	769.5	775.6	777.2	777.2
15°	757.3	760.4	764.9	768.0	769.5
17.5°	743.7	746.6	752.7	758.9	758.9
20°	729.9	732.9	740.6	746.6	748.1
22.5°	713.1	717.7	725.4	732.9	736.0
25°	696.4	701.0	708.5	717.7	720.8
27.5°	676.5	681.1	691.8	702.5	704.0
30°	656.7	661.3	675.0	684.2	688.7
32.5°	632.3	638.4	652.1	665.9	670.4
35°	609.5	615.7	630.9	644.6	650.7
37.5°	585.1	591.2	608.0	624.8	632.3
40°	557.6	565.3	585.1	603.4	614.0
42.5°	531.8	539.5	559.3	583.6	594.3
45°	502.9	510.4	534.9	562.2	576.0
47.5°	472.3	481.5	510.4	544.1	557.6
50°	441.9	452.5	484.6	522.7	537.9
52.5°	409.9	423.6	460.2	501.4	519.6
55°	376.3	393.2	435.8	480.0	498.3
57.5°	344.3	359.7	409.9	457.1	476.9
60°	309.3	329.1	385.5	434.2	455.6
62.5°	275.8	297.2	359.7	411.5	434.2
65°	246.9	268.1	332.2	387.0	411.5
67.5°	208.8	237.7	309.3	361.1	385.5
70°	170.7	210.2	280.4	333.7	356.6
72.5°	141.7	179.8	251.4	304.7	326.1
75°	108.2	150.9	221.0	266.6	280.4
77.5°	80.8	124.9	189.0	211.9	213.3
80°	59.5	96.0	143.2	150.9	156.9
82.5°	41.2	67.0	93.0	102.0	105.1
85°	25.8	39.6	53.3	57.9	57.9
87.5°	13.7	15.2	18.3	18.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)