

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: P475140

Luminaire Tested: **22CZ2-32-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475140
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

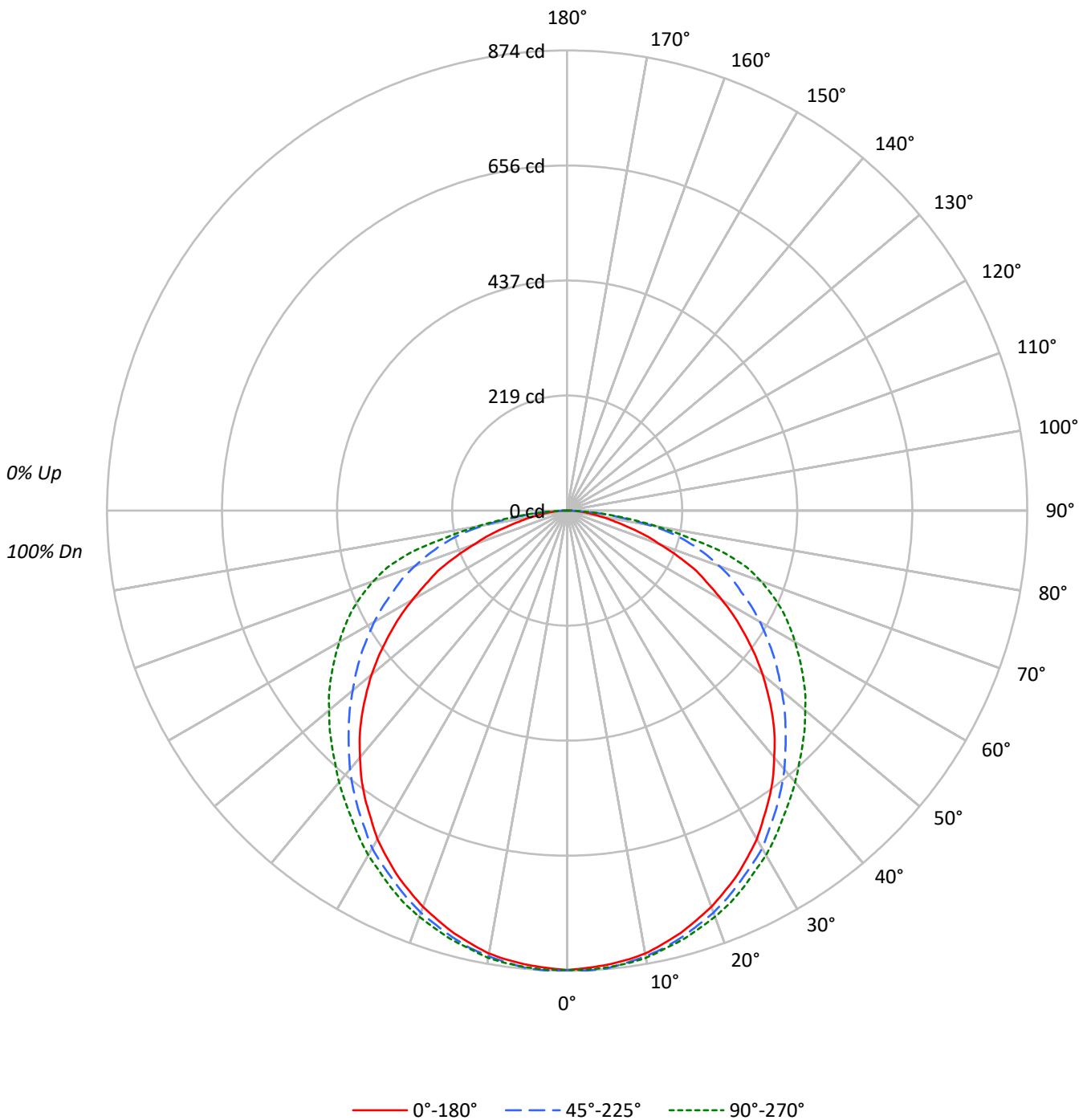
Lumens per Lamp: N/A
Luminaire Lumens: 2650.5 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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



TEST NUMBER: P475140
CATALOG NUMBER: 22CZ2-32-HRP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475140

CATALOG NUMBER: 22CZ2-32-HRP-UNV-L835-CD1-U

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°	2348	2348	2348
5°	2340	2357	2353
10°	2335	2348	2358
15°	2315	2338	2352
20°	2294	2327	2351
25°	2269	2308	2348
30°	2239	2302	2348
35°	2197	2274	2345
40°	2149	2255	2367
45°	2100	2234	2405
50°	2030	2226	2471
55°	1937	2244	2565
60°	1827	2277	2690
65°	1725	2321	2875
70°	1474	2420	3078
75°	1234	2521	3198
80°	1012	2435	2669
85°	877	1806	1961



TEST NUMBER: P475140

CATALOG NUMBER: 22CZ2-32-HRP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	3.1
10°-20°	236.6	8.9
20°-30°	358.6	13.5
30°-40°	433.0	16.3
40°-50°	455.0	17.2
50°-60°	428.1	16.2
60°-70°	356.9	13.5
70°-80°	236.5	8.9
80°-90°	63.0	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°	677.9	25.6
0°-40°	1110.9	41.9
0°-60°	1994.0	75.2
0°-90°	2650.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2650.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	866	868	873	873	871	82
15°	831	834	839	843	844	234
25°	764	769	777	788	791	352
35°	669	676	692	707	714	418
45°	552	560	587	617	632	425
55°	413	431	478	527	547	369
65°	271	294	364	425	452	264
75°	119	166	242	293	308	129
85°	28	43	58	64	64	33
90°	0	0	0	0	0	



TEST NUMBER: P475140

CATALOG NUMBER: 22CZ2-32-HRP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	872.7	872.7	872.7	872.7	872.7
2.5°	869.5	871.1	874.5	874.5	872.7
5°	866.1	867.7	872.7	872.7	871.1
7.5°	861.0	862.8	866.1	869.5	867.7
10°	854.4	856.0	859.4	862.8	862.8
12.5°	842.7	844.3	851.0	852.8	852.8
15°	830.9	834.3	839.3	842.7	844.3
17.5°	816.0	819.2	825.9	832.7	832.7
20°	800.9	804.2	812.6	819.2	820.9
22.5°	782.5	787.5	795.9	804.2	807.6
25°	764.2	769.2	777.4	787.5	790.9
27.5°	742.3	747.3	759.1	770.8	772.4
30°	720.6	725.6	740.7	750.7	755.7
32.5°	693.8	700.5	715.6	730.6	735.6
35°	668.7	675.5	692.2	707.3	713.9
37.5°	642.0	648.6	667.1	685.6	693.8
40°	611.9	620.3	642.0	662.1	673.8
42.5°	583.5	591.9	613.7	640.4	652.1
45°	551.8	560.0	586.9	616.9	632.0
47.5°	518.2	528.3	560.0	597.0	611.9
50°	484.9	496.5	531.7	573.5	590.2
52.5°	449.7	464.8	505.0	550.2	570.1
55°	412.9	431.4	478.2	526.7	546.8
57.5°	377.8	394.6	449.7	501.6	523.3
60°	339.4	361.1	423.0	476.4	499.9
62.5°	302.6	326.1	394.6	451.5	476.4
65°	270.9	294.2	364.5	424.6	451.5
67.5°	229.1	260.8	339.4	396.3	423.0
70°	187.3	230.7	307.6	366.1	391.2
72.5°	155.5	197.3	275.9	334.4	357.9
75°	118.7	165.6	242.5	292.6	307.6
77.5°	88.6	137.1	207.4	232.5	234.1
80°	65.3	105.3	157.1	165.6	172.2
82.5°	45.2	73.5	102.1	111.9	115.3
85°	28.4	43.4	58.5	63.5	63.5
87.5°	15.1	16.7	20.1	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)