

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: P475460

Luminaire Tested: **14CZ2-29-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475460
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-HRP-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

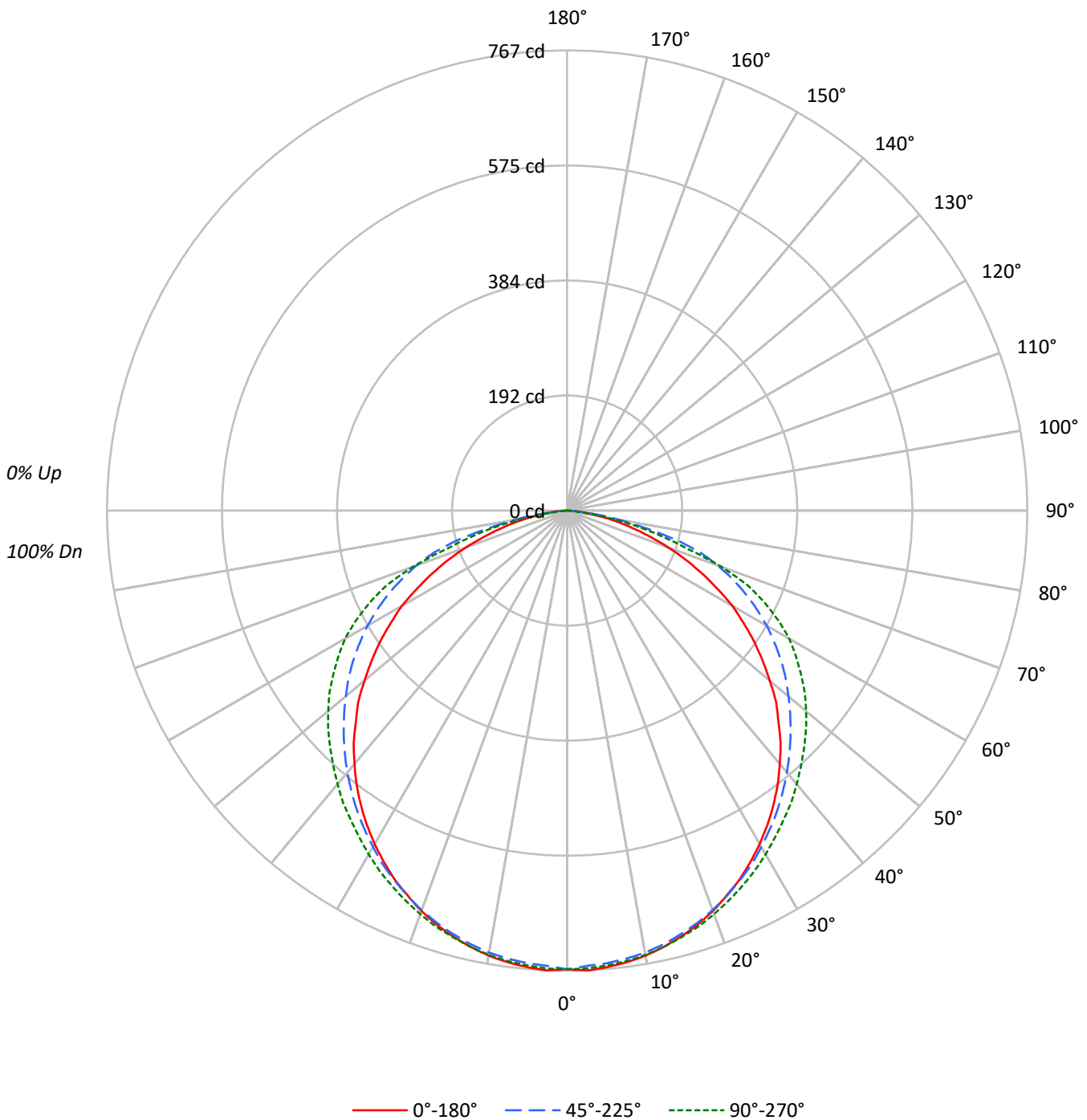
Lumens per Lamp: N/A
Luminaire Lumens: 2284.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.4
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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2057	2057	2057
5°	2063	2046	2055
10°	2058	2044	2054
15°	2047	2037	2051
20°	2034	2029	2050
25°	2016	2021	2050
30°	1994	2012	2055
35°	1969	2006	2067
40°	1937	2002	2091
45°	1895	2005	2125
50°	1845	2017	2176
55°	1783	2041	2233
60°	1712	2068	2300
65°	1580	2088	2313
70°	1409	2098	2142
75°	1180	1943	1665
80°	896	1367	1093
85°	633	479	151



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	3.2
10°-20°	207.3	9.1
20°-30°	315.1	13.8
30°-40°	383.7	16.8
40°-50°	407.6	17.8
50°-60°	385.6	16.9
60°-70°	312.4	13.7
70°-80°	171.3	7.5
80°-90°	28.6	1.3
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°	594.8	26.0
0°-40°	978.5	42.8
0°-60°	1771.7	77.6
0°-90°	2284.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2284.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	764	762	757	762	761	73
15°	735	733	731	737	736	207
25°	679	679	680	690	690	313
35°	599	602	611	626	629	375
45°	498	506	527	551	558	385
55°	380	397	435	467	476	339
65°	248	276	328	357	363	245
75°	114	157	187	165	160	121
85°	20	27	16	8	5	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	764.5	764.5	764.5	764.5	764.5
2.5°	767.3	764.5	759.5	764.5	763.8
5°	763.8	762.3	757.4	762.3	760.9
7.5°	759.5	758.1	753.2	758.8	757.4
10°	753.2	751.8	748.2	753.2	751.8
12.5°	744.7	744.0	740.5	746.1	744.7
15°	734.8	733.4	731.3	737.0	736.2
17.5°	723.6	722.1	720.7	727.8	727.1
20°	710.2	709.4	708.7	716.5	715.8
22.5°	694.6	694.6	695.3	703.8	703.8
25°	679.1	679.1	680.5	689.7	690.4
27.5°	660.8	662.2	665.0	674.9	677.0
30°	641.7	643.2	647.4	658.7	661.5
32.5°	621.3	623.4	629.1	642.5	645.3
35°	599.4	601.6	610.7	625.5	629.1
37.5°	576.2	579.7	590.3	607.2	613.5
40°	551.5	557.1	569.8	588.2	595.2
42.5°	526.8	531.7	548.7	569.8	576.9
45°	497.9	505.6	526.8	550.8	558.5
47.5°	472.5	479.5	504.2	531.0	540.2
50°	440.8	451.3	481.7	511.3	519.7
52.5°	410.4	424.5	459.1	489.4	499.3
55°	380.1	397.0	435.1	466.9	476.0
57.5°	348.4	366.7	409.7	442.2	452.0
60°	318.1	337.8	384.3	417.5	427.4
62.5°	282.1	306.8	356.8	388.6	397.0
65°	248.2	276.4	327.9	356.8	363.2
67.5°	213.7	246.8	298.3	323.7	325.8
70°	179.1	216.5	266.6	282.1	272.2
72.5°	145.3	186.9	232.7	220.0	208.7
75°	113.5	156.6	186.9	165.0	160.1
77.5°	83.9	128.3	130.5	119.9	116.4
80°	57.8	99.4	88.2	76.2	70.5
82.5°	37.4	61.4	48.7	36.0	32.4
85°	20.5	26.8	15.5	7.8	4.9
87.5°	7.8	4.9	2.1	2.1	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)