

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: P475461

Luminaire Tested: **14CZ2-35-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475461
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-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

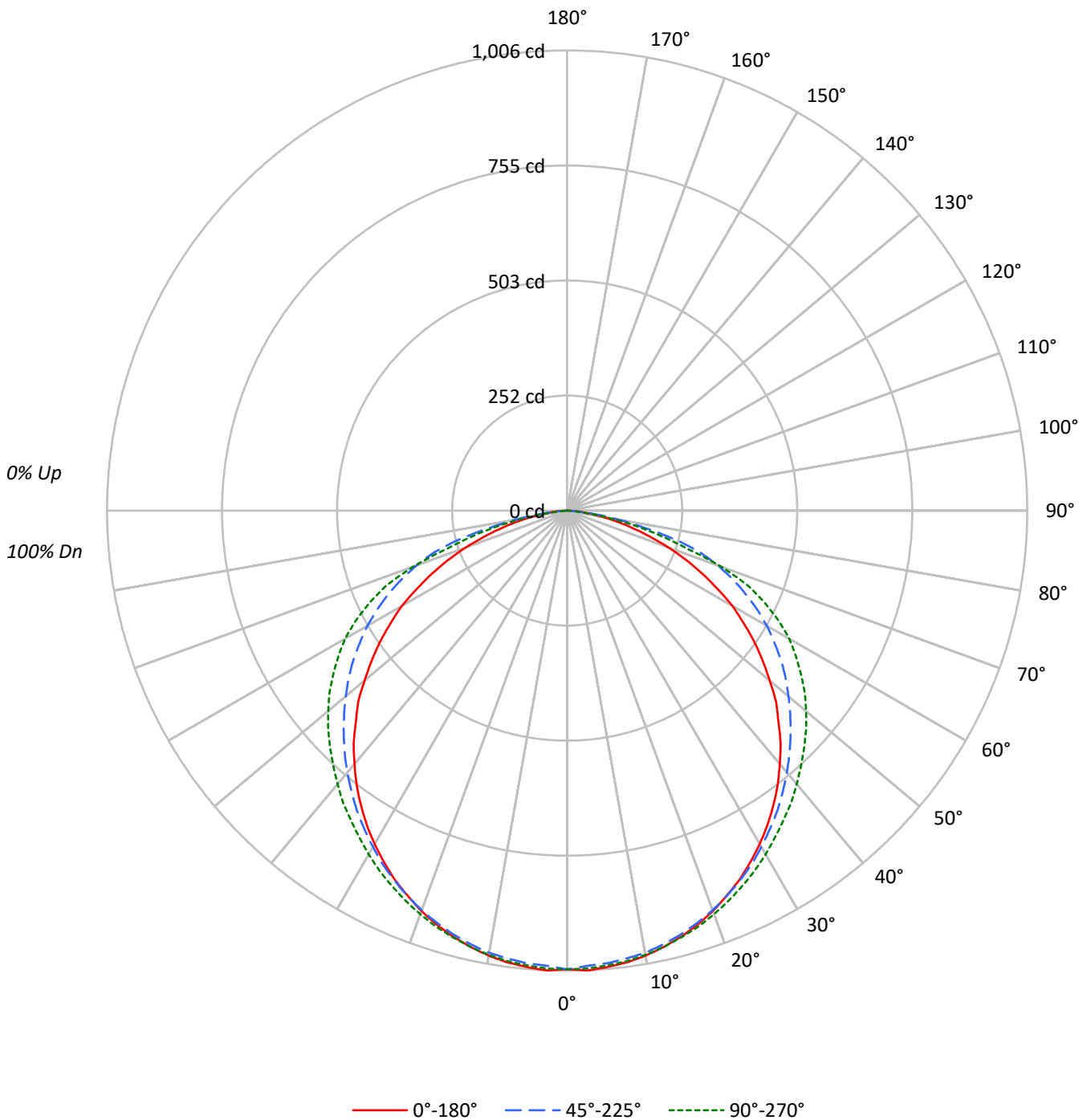
Lumens per Lamp: N/A
Luminaire Lumens: 2996.0 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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°	2698	2698	2698
5°	2706	2684	2696
10°	2699	2682	2695
15°	2685	2673	2690
20°	2668	2662	2689
25°	2645	2651	2689
30°	2616	2639	2696
35°	2583	2632	2711
40°	2541	2625	2742
45°	2485	2630	2788
50°	2420	2645	2854
55°	2339	2677	2929
60°	2245	2713	3017
65°	2073	2739	3033
70°	1849	2751	2810
75°	1548	2548	2183
80°	1176	1791	1433
85°	827	630	201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	3.2
10°-20°	272.0	9.1
20°-30°	413.4	13.8
30°-40°	503.3	16.8
40°-50°	534.7	17.8
50°-60°	505.8	16.9
60°-70°	409.8	13.7
70°-80°	224.7	7.5
80°-90°	37.6	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°	780.2	26.0
0°-40°	1283.5	42.8
0°-60°	2324.0	77.6
0°-90°	2996.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1003	1003	1003	1003	1003	
5°	1002	1000	994	1000	998	95
15°	964	962	959	967	966	272
25°	891	891	893	905	906	410
35°	786	789	801	820	825	492
45°	653	663	691	722	733	505
55°	499	521	571	612	624	445
65°	326	363	430	468	476	322
75°	149	205	245	216	210	159
85°	27	35	20	10	6	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1002.7	1002.7	1002.7	1002.7	1002.7
2.5°	1006.4	1002.7	996.3	1002.7	1001.8
5°	1001.8	1000.0	993.5	1000.0	998.1
7.5°	996.3	994.4	987.9	995.3	993.5
10°	987.9	986.1	981.5	987.9	986.1
12.5°	976.8	975.9	971.3	978.7	976.8
15°	963.9	962.0	959.3	966.7	965.7
17.5°	949.1	947.2	945.4	954.6	953.7
20°	931.5	930.6	929.7	939.8	938.9
22.5°	911.2	911.2	912.1	923.2	923.2
25°	890.8	890.8	892.7	904.7	905.6
27.5°	866.8	868.6	872.3	885.3	888.0
30°	841.8	843.6	849.2	864.0	867.7
32.5°	815.0	817.7	825.1	842.7	846.4
35°	786.3	789.1	801.1	820.5	825.1
37.5°	755.8	760.4	774.3	796.5	804.8
40°	723.4	730.8	747.4	771.5	780.7
42.5°	691.0	697.5	719.7	747.4	756.7
45°	653.1	663.3	691.0	722.5	732.6
47.5°	619.8	629.0	661.4	696.6	708.6
50°	578.1	592.0	631.8	670.7	681.8
52.5°	538.4	556.9	602.2	642.0	654.9
55°	498.6	520.8	570.7	612.4	624.4
57.5°	457.0	481.0	537.4	580.0	592.9
60°	417.2	443.1	504.1	547.6	560.6
62.5°	370.0	402.4	468.1	509.7	520.8
65°	325.6	362.6	430.1	468.1	476.4
67.5°	280.3	323.8	391.3	424.6	427.4
70°	235.0	284.0	349.7	370.0	357.1
72.5°	190.6	245.1	305.3	288.6	273.8
75°	148.9	205.4	245.1	216.5	210.0
77.5°	110.1	168.4	171.1	157.3	152.6
80°	75.9	130.4	115.6	99.9	92.5
82.5°	49.0	80.5	63.8	47.2	42.6
85°	26.8	35.2	20.4	10.2	6.5
87.5°	10.2	6.5	2.8	2.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)