

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: P475420

Luminaire Tested: **14CZ2-48HE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475420
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-RDP-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3154.9 lumens
Efficiency: N/A
Efficacy: 88.4 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

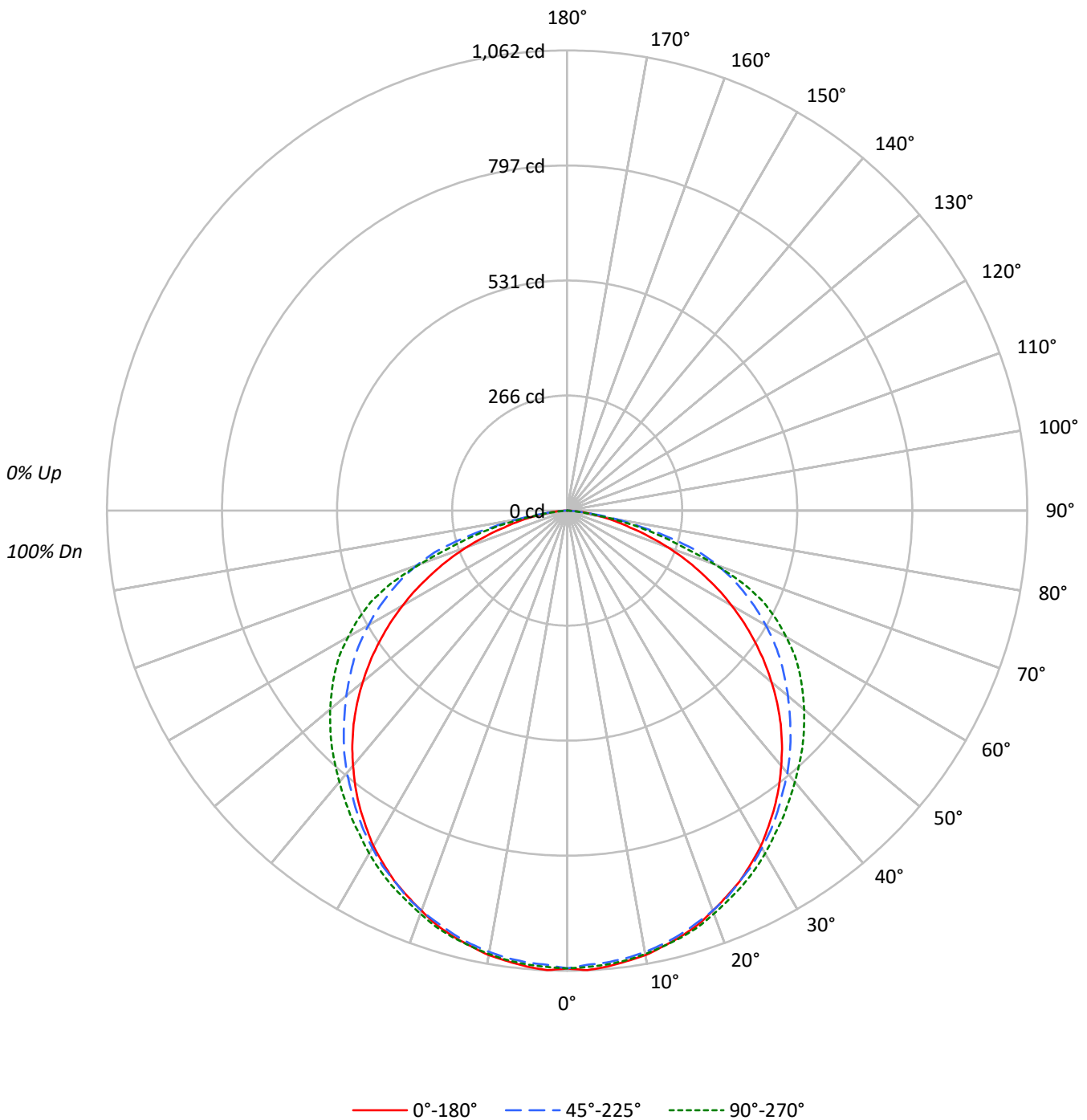
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475420

CATALOG NUMBER: 14CZ2-48HE-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475420

CATALOG NUMBER: 14CZ2-48HE-RDP-UNV-L830-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	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	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	40	51	44	39	50	44	39	37
7	64	50	42	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	42	34	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°	2843	2843	2843
5°	2854	2828	2841
10°	2847	2827	2840
15°	2834	2820	2841
20°	2814	2814	2835
25°	2801	2801	2838
30°	2778	2793	2839
35°	2743	2783	2848
40°	2700	2777	2872
45°	2653	2775	2925
50°	2578	2784	2990
55°	2485	2820	3074
60°	2359	2850	3141
65°	2180	2886	3184
70°	1938	2907	2849
75°	1562	2612	2279
80°	1221	1832	1489
85°	837	531	380



TEST NUMBER: P475420

CATALOG NUMBER: 14CZ2-48HE-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	3.2
10°-20°	286.9	9.1
20°-30°	436.9	13.8
30°-40°	532.2	16.9
40°-50°	564.6	17.9
50°-60°	532.9	16.9
60°-70°	430.2	13.6
70°-80°	233.4	7.4
80°-90°	37.8	1.2
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°	823.9	26.1
0°-40°	1356.0	43.0
0°-60°	2453.5	77.8
0°-90°	3154.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3154.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1057	1057	1057	1057	1057	
5°	1057	1054	1047	1054	1052	100
15°	1017	1015	1012	1020	1020	287
25°	943	941	943	953	956	434
35°	835	840	847	864	867	522
45°	697	707	729	756	768	537
55°	530	552	601	640	655	473
65°	342	384	453	490	500	339
75°	150	219	251	227	219	164
85°	27	30	17	15	12	35
90°	0	0	0	0	0	



TEST NUMBER: P475420

CATALOG NUMBER: 14CZ2-48HE-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1056.6	1056.6	1056.6	1056.6	1056.6
2.5°	1061.6	1056.6	1049.3	1056.6	1054.2
5°	1056.6	1054.2	1046.8	1054.2	1051.7
7.5°	1049.3	1049.3	1041.9	1046.8	1046.8
10°	1041.9	1039.4	1034.5	1041.9	1039.4
12.5°	1029.6	1027.1	1024.6	1032.0	1029.6
15°	1017.2	1014.8	1012.3	1019.7	1019.7
17.5°	1002.5	1000.0	997.5	1007.4	1007.4
20°	982.8	982.8	982.8	992.6	990.1
22.5°	963.1	963.1	965.5	975.4	972.9
25°	943.3	940.9	943.3	953.2	955.7
27.5°	918.7	921.2	923.6	933.5	936.0
30°	894.1	896.5	899.0	911.3	913.8
32.5°	864.5	869.5	874.4	889.2	889.2
35°	835.0	839.9	847.3	864.5	867.0
37.5°	803.0	807.9	817.7	837.4	842.4
40°	768.5	775.9	790.6	810.3	817.7
42.5°	734.0	743.8	761.1	783.2	793.1
45°	697.0	706.9	729.1	756.2	768.5
47.5°	657.6	669.9	697.0	731.5	741.4
50°	615.8	633.0	665.0	702.0	714.3
52.5°	573.9	593.6	633.0	672.4	684.7
55°	529.6	551.7	601.0	640.4	655.2
57.5°	485.2	509.9	566.5	608.4	623.2
60°	438.4	468.0	529.6	571.4	583.7
62.5°	391.6	426.1	492.6	534.5	544.3
65°	342.4	384.2	453.2	490.1	500.0
67.5°	295.6	344.8	413.8	440.9	440.9
70°	246.3	300.5	369.5	376.8	362.1
72.5°	197.0	258.6	320.2	293.1	280.8
75°	150.2	219.2	251.2	226.6	219.2
77.5°	113.3	177.3	177.3	162.6	157.6
80°	78.8	135.5	118.2	103.4	96.1
82.5°	51.7	76.4	61.6	49.3	41.9
85°	27.1	29.6	17.2	14.8	12.3
87.5°	9.9	4.9	2.5	4.9	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)