

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: P294818

Luminaire Tested: **14CZ2-48HE-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P294818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-HRP-UNV-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (196) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3317.4 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

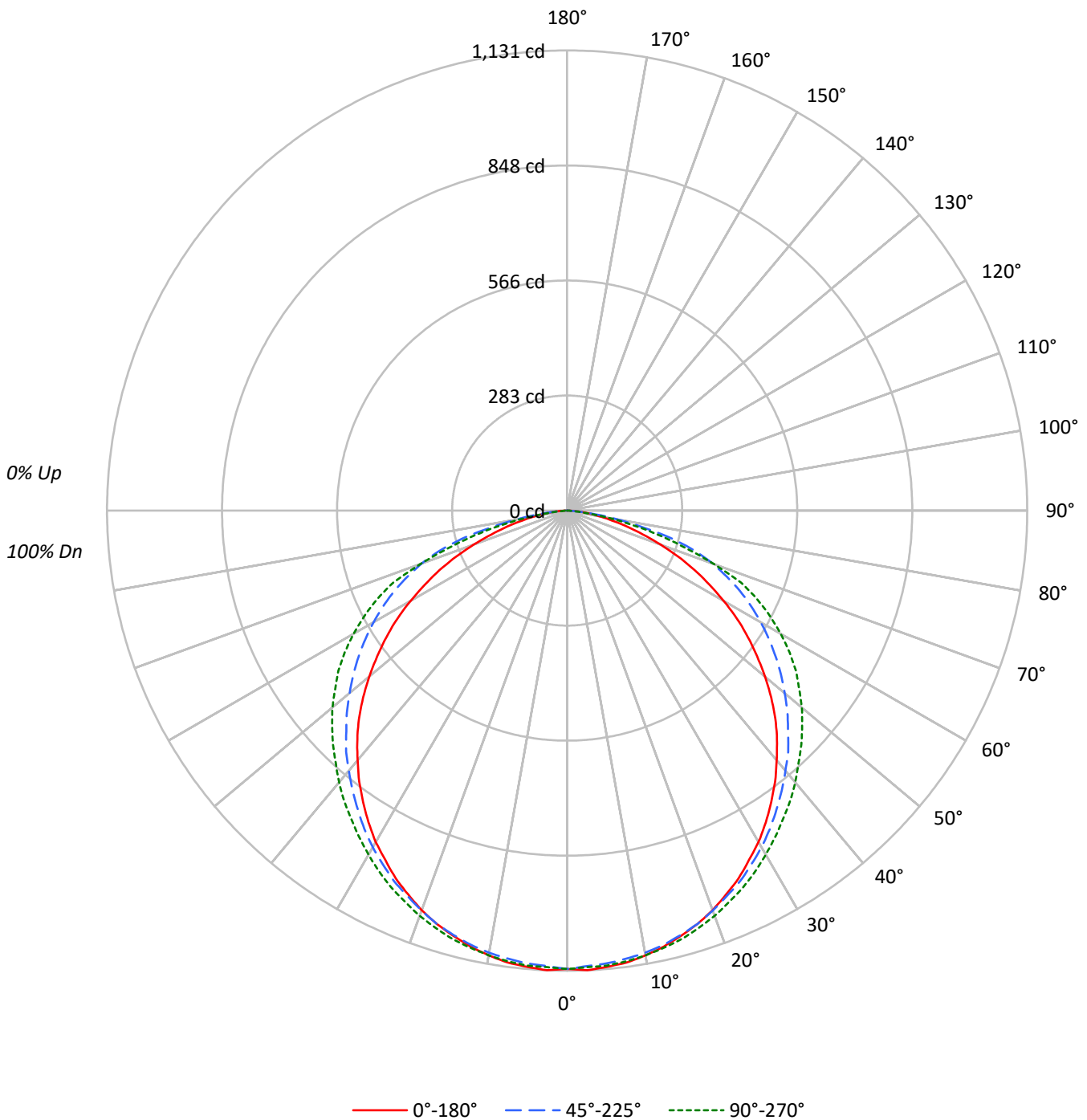
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294818

CATALOG NUMBER: 14CZ2-48HE-HRP-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P294818

CATALOG NUMBER: 14CZ2-48HE-HRP-UNV-L950-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	78	96	88	82	77	85	79	75		82	77	73		78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3032	3032	3032
5°	3041	3018	3032
10°	3033	3016	3033
15°	3014	3008	3037
20°	2993	2996	3035
25°	2961	2986	3035
30°	2924	2969	3034
35°	2872	2947	3040
40°	2814	2931	3064
45°	2755	2922	3097
50°	2660	2922	3153
55°	2545	2936	3220
60°	2392	2958	3262
65°	2205	2989	3281
70°	1921	2996	3020
75°	1583	2787	2440
80°	1244	2005	1633
85°	966	772	386



TEST NUMBER: P294818

CATALOG NUMBER: 14CZ2-48HE-HRP-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.7	3.2
10°-20°	306.1	9.2
20°-30°	464.8	14.0
30°-40°	563.2	17.0
40°-50°	593.4	17.9
50°-60°	554.0	16.7
60°-70°	442.7	13.3
70°-80°	243.6	7.3
80°-90°	43.0	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°	877.5	26.5
0°-40°	1440.6	43.4
0°-60°	2588.1	78.0
0°-90°	3317.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3317.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1127	1127	1127	1127	1127	
5°	1126	1122	1117	1124	1122	107
15°	1082	1082	1080	1090	1090	305
25°	997	999	1006	1020	1022	459
35°	874	882	897	920	925	547
45°	724	738	768	802	814	557
55°	542	570	626	670	686	484
65°	346	390	469	508	515	341
75°	152	218	268	241	235	164
85°	31	40	25	16	12	38
90°	0	0	0	0	0	



TEST NUMBER: P294818

CATALOG NUMBER: 14CZ2-48HE-HRP-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1126.6	1126.6	1126.6	1126.6	1126.6
2.5°	1130.8	1127.7	1120.4	1126.6	1123.5
5°	1125.6	1122.4	1117.2	1124.5	1122.4
7.5°	1120.4	1116.2	1111.0	1119.3	1117.2
10°	1109.9	1106.8	1103.7	1111.0	1109.9
12.5°	1097.4	1096.4	1093.2	1101.6	1100.5
15°	1081.8	1081.8	1079.7	1090.1	1090.1
17.5°	1065.1	1064.0	1065.1	1076.5	1075.5
20°	1045.2	1045.2	1046.3	1059.9	1059.9
22.5°	1021.3	1022.3	1025.4	1042.1	1041.1
25°	997.3	999.3	1005.6	1020.2	1022.3
27.5°	968.1	973.3	980.6	998.3	1000.4
30°	940.9	944.1	955.5	972.2	976.4
32.5°	908.6	914.9	927.4	946.1	951.4
35°	874.2	882.5	897.1	920.1	925.3
37.5°	839.7	847.0	866.9	890.9	900.2
40°	801.1	813.7	834.5	861.7	872.1
42.5°	763.6	776.1	804.3	832.4	841.8
45°	724.0	737.5	767.8	802.2	813.7
47.5°	680.1	695.8	734.4	770.9	783.4
50°	635.3	655.1	697.9	738.6	753.2
52.5°	588.3	613.4	662.4	705.2	718.7
55°	542.4	569.6	625.9	669.7	686.4
57.5°	495.5	524.7	588.3	638.4	647.8
60°	444.4	479.9	549.7	593.6	606.1
62.5°	394.3	435.0	510.1	551.8	562.3
65°	346.3	390.1	469.4	508.0	515.3
67.5°	294.2	346.3	424.6	460.0	462.1
70°	244.1	304.6	380.8	397.4	383.9
72.5°	195.1	259.7	329.6	316.1	304.6
75°	152.3	218.0	268.1	241.0	234.7
77.5°	112.7	178.4	191.9	177.3	165.9
80°	80.3	140.8	129.4	110.6	105.4
82.5°	55.3	88.7	70.9	55.3	48.0
85°	31.3	39.6	25.0	15.6	12.5
87.5°	13.6	9.4	5.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)