

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: P275967

Luminaire Tested: **24CZ2-30HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275967
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2259.5 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

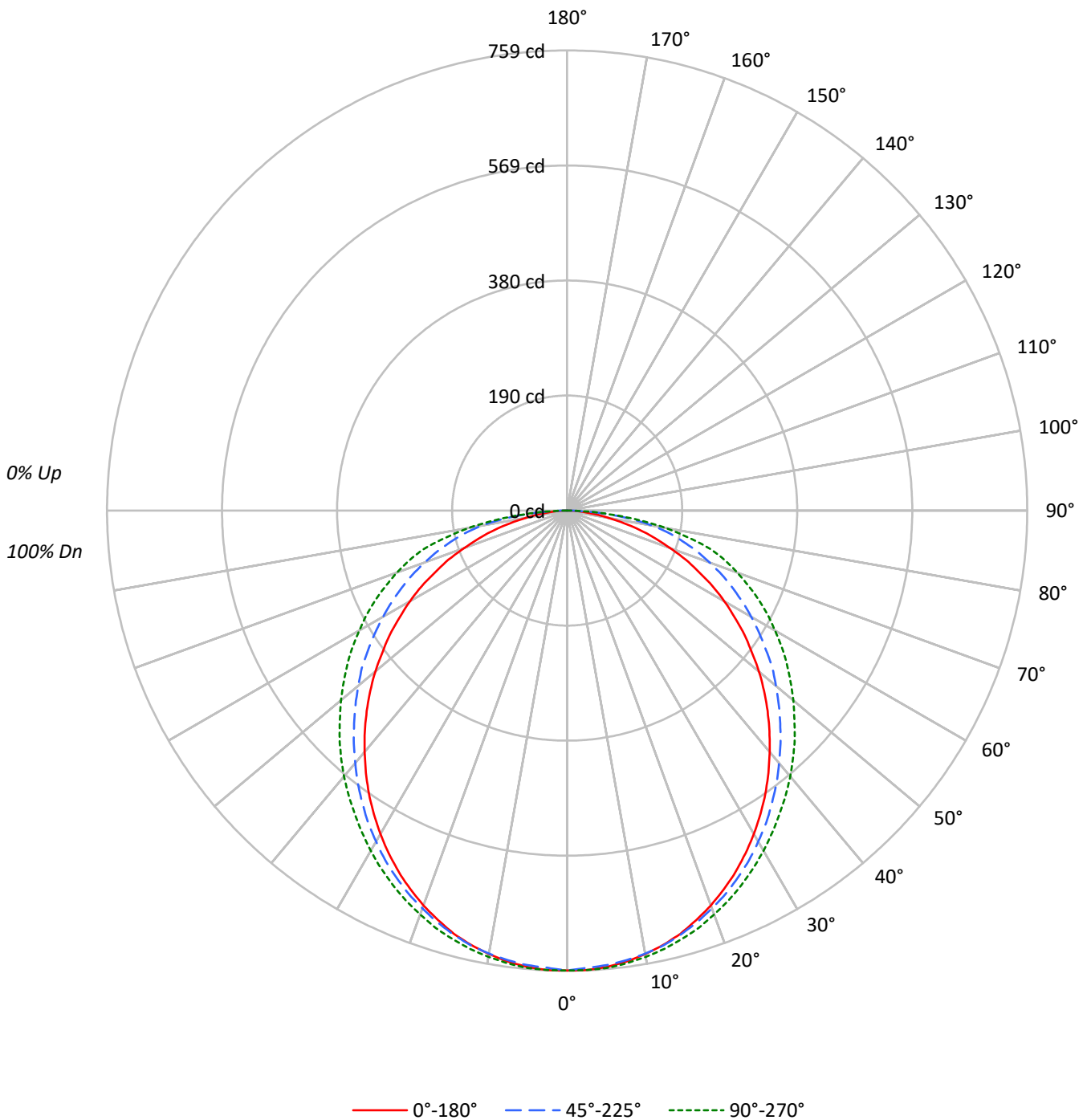
Input Watts (W): 20.074329
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P275967

CATALOG NUMBER: 24CZ2-30HE-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P275967

CATALOG NUMBER: 24CZ2-30HE-UNV-L93050-W2A1-U-3000K

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	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	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	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1021	1021	1021
5°	1021	1016	1023
10°	1015	1014	1021
15°	1006	1008	1019
20°	992	1000	1015
25°	976	991	1011
30°	957	979	1006
35°	936	967	1003
40°	913	955	1005
45°	890	946	1010
50°	865	941	1020
55°	838	939	1038
60°	806	944	1065
65°	763	958	1111
70°	709	982	1175
75°	647	1031	1274
80°	532	1110	1274
85°	408	1025	1095



TEST NUMBER: P275967

CATALOG NUMBER: 24CZ2-30HE-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.2
10°-20°	204.8	9.1
20°-30°	308.2	13.6
30°-40°	369.4	16.3
40°-50°	384.9	17.0
50°-60°	358.1	15.9
60°-70°	295.0	13.1
70°-80°	200.9	8.9
80°-90°	66.3	2.9
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°	584.8	25.9
0°-40°	954.2	42.2
0°-60°	1697.3	75.1
0°-90°	2259.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	756	756	753	756	757	72
15°	722	723	724	731	732	204
25°	658	661	667	679	681	303
35°	570	577	589	605	611	356
45°	468	477	497	522	531	361
55°	357	370	400	432	443	319
65°	240	260	301	336	349	238
75°	124	152	198	234	245	131
85°	26	51	66	71	71	33
90°	0	0	0	0	0	



TEST NUMBER: P275967

CATALOG NUMBER: 24CZ2-30HE-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.6	758.6	758.6	758.6	758.6
2.5°	758.6	758.6	754.8	758.6	758.6
5°	755.6	755.6	752.6	756.4	757.1
7.5°	750.3	751.1	748.1	752.6	753.3
10°	742.8	743.5	742.0	746.5	747.3
12.5°	733.7	734.5	734.5	739.8	740.5
15°	722.4	723.2	723.9	730.7	731.5
17.5°	708.1	710.4	711.9	720.2	721.7
20°	693.0	695.3	698.3	707.3	708.8
22.5°	675.7	678.7	684.0	693.8	696.0
25°	657.6	660.6	667.4	678.7	680.9
27.5°	637.2	641.7	650.0	662.1	665.1
30°	616.1	620.6	630.4	643.2	647.8
32.5°	593.5	599.5	610.8	625.1	629.7
35°	570.1	576.9	588.9	604.8	610.8
37.5°	545.2	552.7	567.1	584.4	592.0
40°	519.6	528.6	543.7	564.1	572.4
42.5°	493.9	502.2	521.1	542.9	552.0
45°	467.5	477.3	496.9	521.8	530.9
47.5°	440.4	450.2	473.6	500.0	508.3
50°	413.2	423.0	449.4	477.3	487.1
52.5°	383.8	396.7	426.8	454.7	464.5
55°	357.4	369.5	400.4	432.1	442.7
57.5°	327.3	341.6	375.5	408.7	420.0
60°	299.4	314.5	350.7	384.6	395.9
62.5°	270.7	287.3	325.8	360.5	373.3
65°	239.8	260.2	300.9	336.3	349.1
67.5°	211.9	233.0	276.0	312.2	323.5
70°	180.2	205.9	249.6	285.8	298.6
72.5°	153.1	178.7	224.7	260.2	273.0
75°	124.4	152.3	198.3	233.8	245.1
77.5°	95.8	126.7	172.7	199.8	203.6
80°	68.6	101.0	143.3	159.1	164.4
82.5°	48.3	77.7	105.6	116.1	119.1
85°	26.4	51.3	66.4	70.9	70.9
87.5°	11.3	21.9	26.4	27.1	27.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)