

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: P275984

Luminaire Tested: **24CZ2-45HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275984
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: 24CZ2-45HE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3894.9 lumens
Efficiency: N/A
Efficacy: 120.8 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

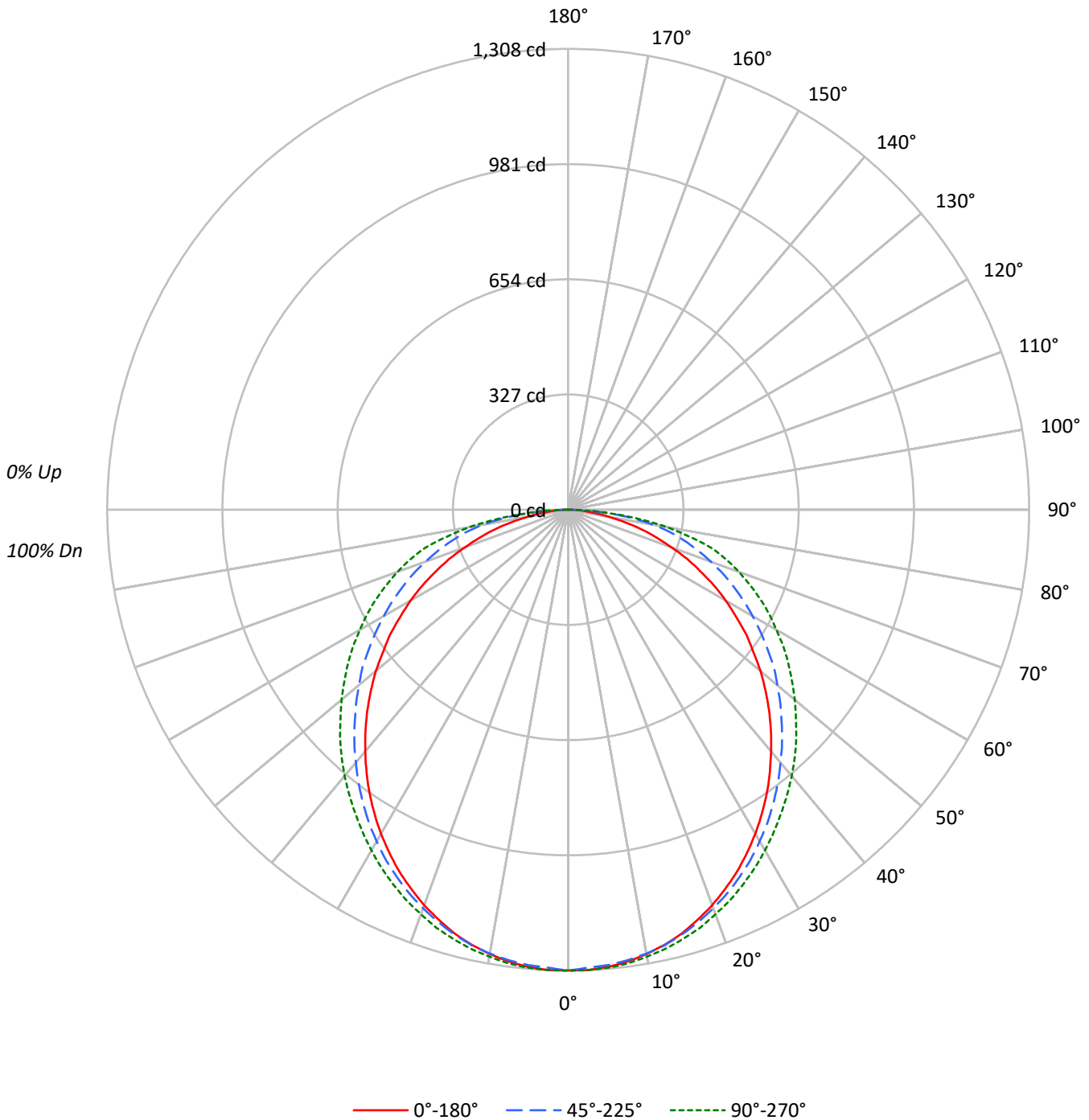
Input Watts (W): 32.251284
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1759	1759	1759
5°	1759	1752	1763
10°	1749	1748	1760
15°	1735	1738	1756
20°	1710	1724	1750
25°	1683	1708	1743
30°	1650	1688	1735
35°	1614	1668	1729
40°	1573	1646	1733
45°	1533	1630	1741
50°	1491	1622	1758
55°	1445	1619	1790
60°	1389	1627	1836
65°	1316	1651	1916
70°	1222	1693	2025
75°	1115	1777	2196
80°	917	1914	2196
85°	702	1766	1886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.2
10°-20°	353.1	9.1
20°-30°	531.3	13.6
30°-40°	636.7	16.3
40°-50°	663.5	17.0
50°-60°	617.4	15.9
60°-70°	508.5	13.1
70°-80°	346.3	8.9
80°-90°	114.3	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°	1008.1	25.9
0°-40°	1644.8	42.2
0°-60°	2925.7	75.1
0°-90°	3894.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3894.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1302	1302	1297	1304	1305	124
15°	1245	1247	1248	1260	1261	351
25°	1134	1139	1150	1170	1174	522
35°	983	994	1015	1042	1053	614
45°	806	823	857	900	915	622
55°	616	637	690	745	763	549
65°	413	448	519	580	602	410
75°	214	263	342	403	422	226
85°	46	88	114	122	122	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1307.7	1307.7	1307.7	1307.7	1307.7
2.5°	1307.7	1307.7	1301.2	1307.7	1307.7
5°	1302.5	1302.5	1297.3	1303.8	1305.1
7.5°	1293.4	1294.7	1289.5	1297.3	1298.6
10°	1280.4	1281.7	1279.1	1286.9	1288.2
12.5°	1264.8	1266.1	1266.1	1275.2	1276.5
15°	1245.3	1246.6	1247.9	1259.6	1260.9
17.5°	1220.6	1224.5	1227.1	1241.4	1244.0
20°	1194.6	1198.5	1203.7	1219.3	1221.9
22.5°	1164.7	1169.9	1179.0	1195.9	1199.8
25°	1133.5	1138.7	1150.4	1169.9	1173.8
27.5°	1098.4	1106.2	1120.5	1141.3	1146.5
30°	1062.0	1069.8	1086.7	1108.8	1116.6
32.5°	1023.0	1033.4	1052.9	1077.6	1085.4
35°	982.7	994.4	1015.2	1042.5	1052.9
37.5°	939.8	952.8	977.5	1007.4	1020.4
40°	895.6	911.2	937.2	972.3	986.6
42.5°	851.4	865.7	898.2	935.9	951.5
45°	805.9	822.8	856.6	899.5	915.1
47.5°	759.1	776.0	816.3	861.8	876.1
50°	712.3	729.2	774.7	822.8	839.7
52.5°	661.6	683.7	735.7	783.8	800.7
55°	616.2	637.0	690.2	744.8	763.0
57.5°	564.2	588.9	647.3	704.5	724.0
60°	516.1	542.1	604.5	662.9	682.4
62.5°	466.7	495.3	561.6	621.4	643.5
65°	413.4	448.5	518.7	579.8	601.9
67.5°	365.3	401.7	475.8	538.2	557.7
70°	310.7	354.9	430.3	492.7	514.8
72.5°	263.9	308.1	387.4	448.5	470.6
75°	214.5	262.6	341.9	403.0	422.5
77.5°	165.1	218.4	297.7	344.5	351.0
80°	118.3	174.2	247.0	274.3	283.4
82.5°	83.2	133.9	182.0	200.2	205.4
85°	45.5	88.4	114.4	122.2	122.2
87.5°	19.5	37.7	45.5	46.8	48.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)