

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: P263339

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263339  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-SQP-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2753.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

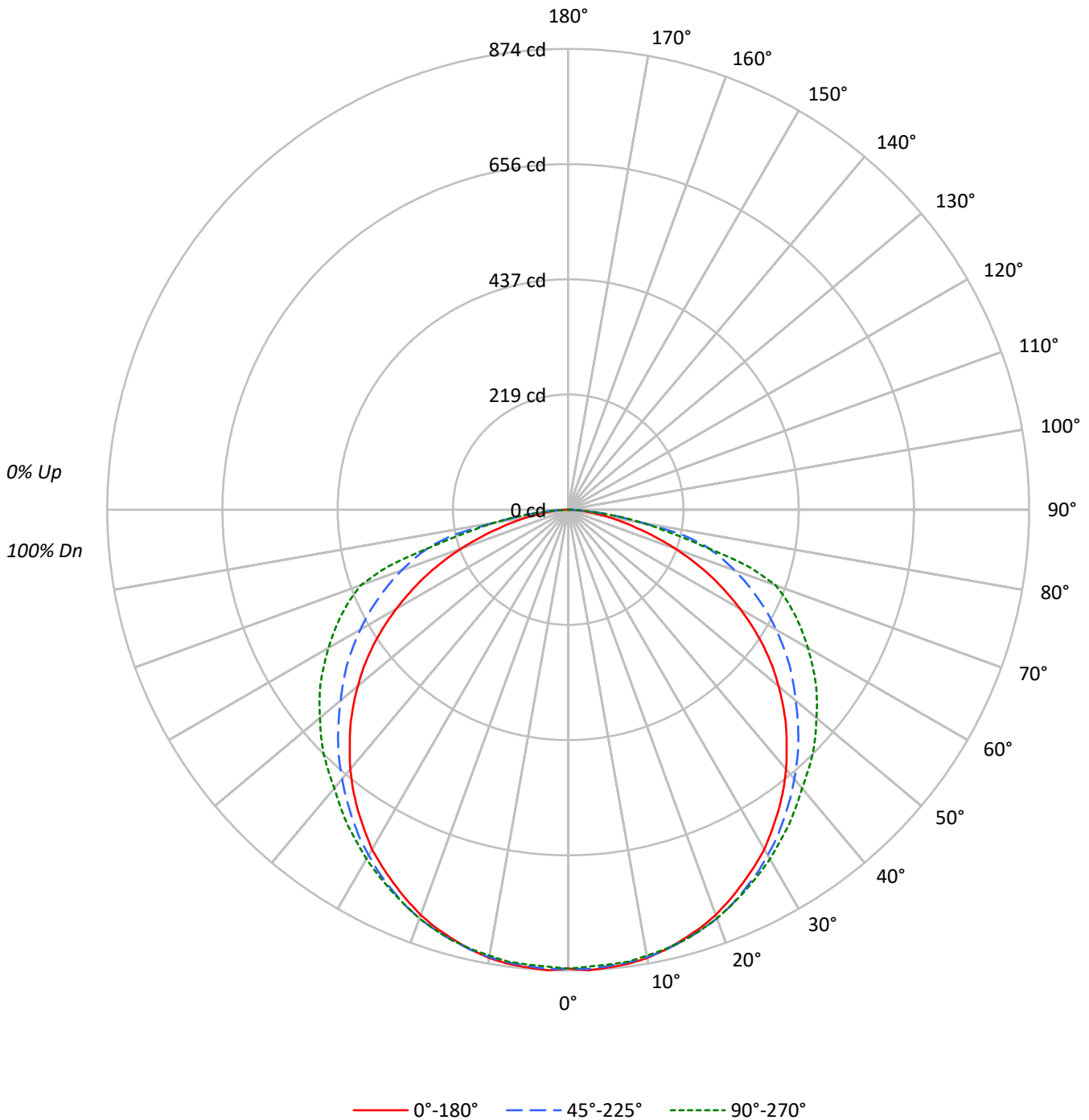
Input Watts (W): 34.968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	97	93	96	93	90		92	90	87		89	87	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	60		70	64	59		67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44		55	49	43		54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1171	1171	1171
5°	1177	1174	1170
10°	1179	1177	1173
15°	1175	1179	1179
20°	1171	1181	1181
25°	1161	1178	1182
30°	1155	1175	1189
35°	1142	1173	1198
40°	1129	1171	1211
45°	1112	1174	1247
50°	1090	1179	1286
55°	1061	1201	1344
60°	1014	1224	1412
65°	951	1263	1512
70°	850	1320	1645
75°	702	1412	1360
80°	573	1091	1102
85°	462	724	681



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	3.0
10°-20°	238.5	8.7
20°-30°	364.5	13.2
30°-40°	445.8	16.2
40°-50°	477.0	17.3
50°-60°	456.8	16.6
60°-70°	386.4	14.0
70°-80°	245.0	8.9
80°-90°	56.3	2.0
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°	685.7	24.9
0°-40°	1131.5	41.1
0°-60°	2065.3	75.0
0°-90°	2753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2753.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	872	867	869	867	866	83
15°	843	842	846	846	846	238
25°	782	782	794	796	796	361
35°	695	700	714	724	730	435
45°	584	594	617	643	656	450
55°	452	466	512	555	573	403
65°	299	327	397	451	475	294
75°	135	191	272	270	262	147
85°	30	46	47	43	44	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	870.3	870.3	870.3	870.3	870.3
2.5°	874.5	870.3	871.7	870.3	867.4
5°	871.7	867.4	868.9	867.4	866.0
7.5°	868.9	864.6	866.0	864.6	864.6
10°	863.2	858.9	861.7	860.3	858.9
12.5°	854.6	851.8	854.6	853.2	853.2
15°	843.3	841.8	846.1	846.1	846.1
17.5°	831.9	830.5	836.1	836.1	836.1
20°	817.7	816.2	824.8	824.8	824.8
22.5°	800.6	799.2	810.6	810.6	810.6
25°	782.1	782.1	793.5	796.3	796.3
27.5°	763.6	763.6	776.4	780.7	780.7
30°	743.7	743.7	756.5	762.2	765.0
32.5°	719.5	722.4	736.6	743.7	746.6
35°	695.4	699.6	713.9	723.8	729.5
37.5°	669.8	674.0	691.1	702.5	709.6
40°	642.8	648.4	666.9	681.1	689.7
42.5°	612.9	621.4	642.8	661.2	672.6
45°	584.4	594.4	617.2	642.8	655.6
47.5°	553.2	564.5	590.1	622.8	635.6
50°	520.5	531.8	563.1	600.1	614.3
52.5°	487.8	500.6	537.5	577.3	594.4
55°	452.2	466.4	511.9	554.6	573.1
57.5°	415.2	432.3	483.5	529.0	548.9
60°	376.8	398.2	455.0	503.4	524.7
62.5°	337.0	362.6	426.6	477.8	500.6
65°	298.6	327.1	396.7	450.8	475.0
67.5°	257.4	292.9	366.9	425.2	447.9
70°	216.1	257.4	335.6	395.3	418.1
72.5°	174.9	224.7	304.3	358.3	358.3
75°	135.1	190.6	271.6	270.2	261.7
77.5°	102.4	159.3	223.3	190.6	192.0
80°	73.9	128.0	140.8	140.8	142.2
82.5°	49.8	98.1	91.0	89.6	92.4
85°	29.9	45.5	46.9	42.7	44.1
87.5°	14.2	15.6	12.8	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)