

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: P263557

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263557  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2977.0 lumens  
Efficiency: N/A  
Efficacy: 85.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

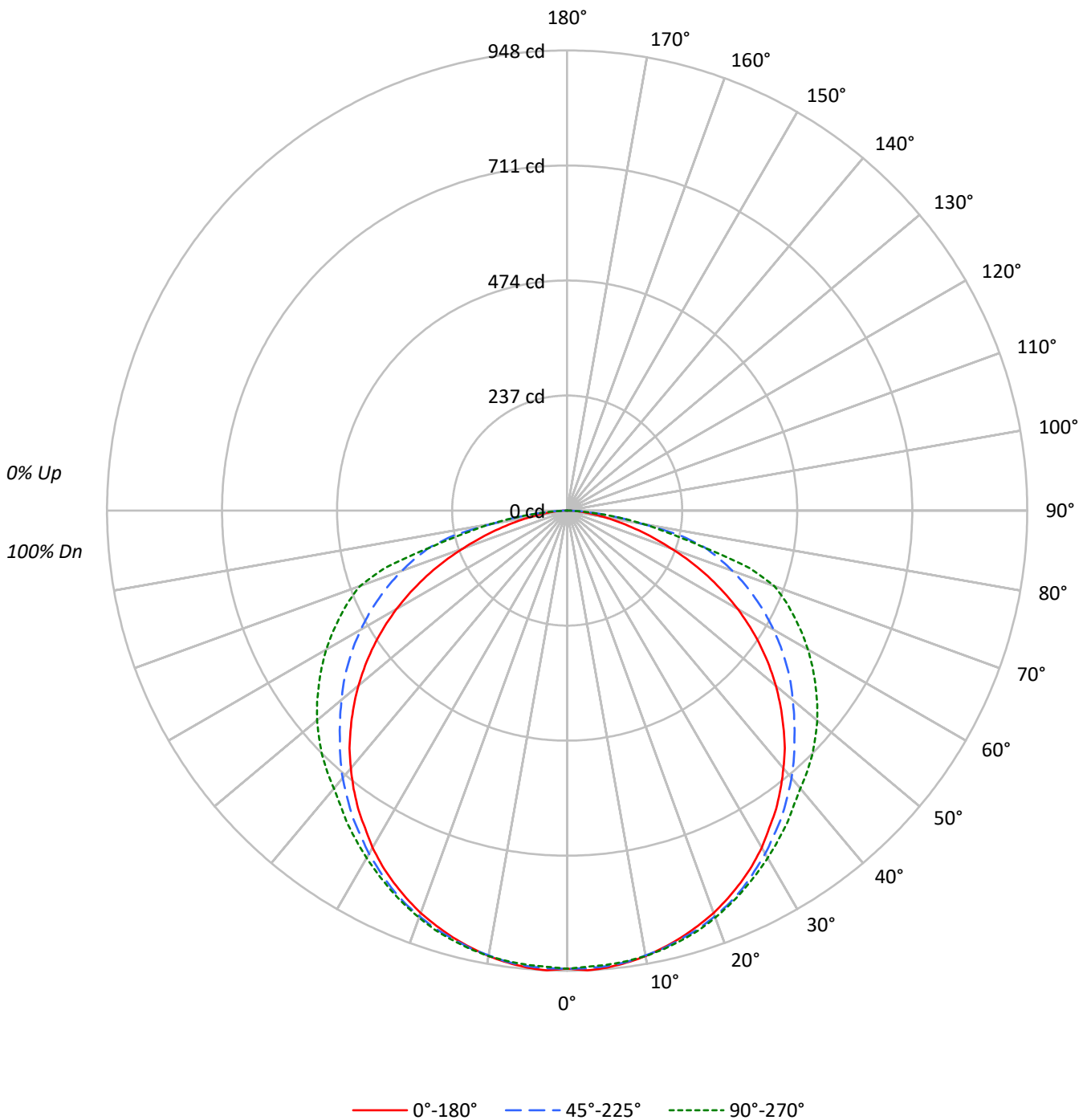
Input Watts (W): 34.898064  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		40	34	29	27
9	55	41	33	27	53	41	32	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°	1270	1270	1270
5°	1277	1273	1269
10°	1273	1271	1273
15°	1268	1272	1276
20°	1263	1274	1278
25°	1255	1273	1279
30°	1245	1268	1284
35°	1232	1266	1295
40°	1217	1264	1313
45°	1199	1260	1358
50°	1175	1270	1408
55°	1141	1293	1464
60°	1092	1321	1542
65°	1017	1362	1642
70°	899	1424	1787
75°	754	1524	1501
80°	602	1203	1249
85°	475	815	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.5	3.0
10°-20°	257.6	8.7
20°-30°	393.5	13.2
30°-40°	481.0	16.2
40°-50°	514.9	17.3
50°-60°	493.9	16.6
60°-70°	417.0	14.0
70°-80°	266.5	9.0
80°-90°	63.0	2.1
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°	740.6	24.9
0°-40°	1221.6	41.0
0°-60°	2230.4	74.9
0°-90°	2977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2977.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	944	944	944	944	944	
5°	945	939	942	941	939	90
15°	910	907	913	916	916	257
25°	846	844	857	860	862	390
35°	750	756	771	781	788	469
45°	630	640	662	693	714	486
55°	486	503	551	601	624	434
65°	320	350	428	488	516	315
75°	145	207	293	299	289	156
85°	31	51	53	51	48	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	943.7	943.7	943.7	943.7	943.7
2.5°	948.1	942.3	943.7	943.7	940.8
5°	945.2	939.3	942.3	940.8	939.3
7.5°	939.3	934.9	937.9	937.9	936.4
10°	932.0	927.6	930.5	932.0	932.0
12.5°	921.8	918.8	923.2	923.2	924.7
15°	910.0	907.1	913.0	915.9	915.9
17.5°	896.8	895.4	902.7	904.2	905.6
20°	882.2	880.7	889.5	889.5	892.4
22.5°	864.6	863.1	874.9	874.9	877.8
25°	845.6	844.1	857.3	860.2	861.7
27.5°	825.0	823.6	836.8	841.2	844.1
30°	801.6	801.6	816.2	822.1	826.5
32.5°	775.2	779.6	792.8	801.6	807.4
35°	750.3	756.2	770.8	781.1	788.4
37.5°	722.5	728.3	744.4	757.6	766.4
40°	693.1	700.5	719.5	734.2	747.4
42.5°	663.8	671.2	691.7	713.7	731.2
45°	630.1	640.4	662.4	693.1	713.7
47.5°	596.4	606.7	634.5	672.6	693.1
50°	561.3	573.0	606.7	650.6	672.6
52.5°	524.6	537.8	580.3	627.2	649.2
55°	486.5	502.6	551.0	600.8	624.3
57.5°	447.0	464.5	521.7	574.4	599.4
60°	405.9	427.9	490.9	546.6	573.0
62.5°	363.4	389.8	460.1	517.3	545.1
65°	319.5	350.2	427.9	488.0	515.8
67.5°	274.0	315.1	395.7	458.7	486.5
70°	228.6	277.0	362.0	426.4	454.3
72.5°	186.1	241.8	328.3	388.3	394.2
75°	145.1	206.6	293.1	298.9	288.7
77.5°	108.4	171.5	241.8	215.4	214.0
80°	77.7	137.7	155.3	159.7	161.2
82.5°	51.3	104.0	101.1	104.0	102.6
85°	30.8	51.3	52.8	51.3	48.4
87.5°	14.7	19.1	14.7	13.2	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)