

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: P263763

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263763  
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-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3200.0 lumens  
Efficiency: N/A  
Efficacy: 89.8 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

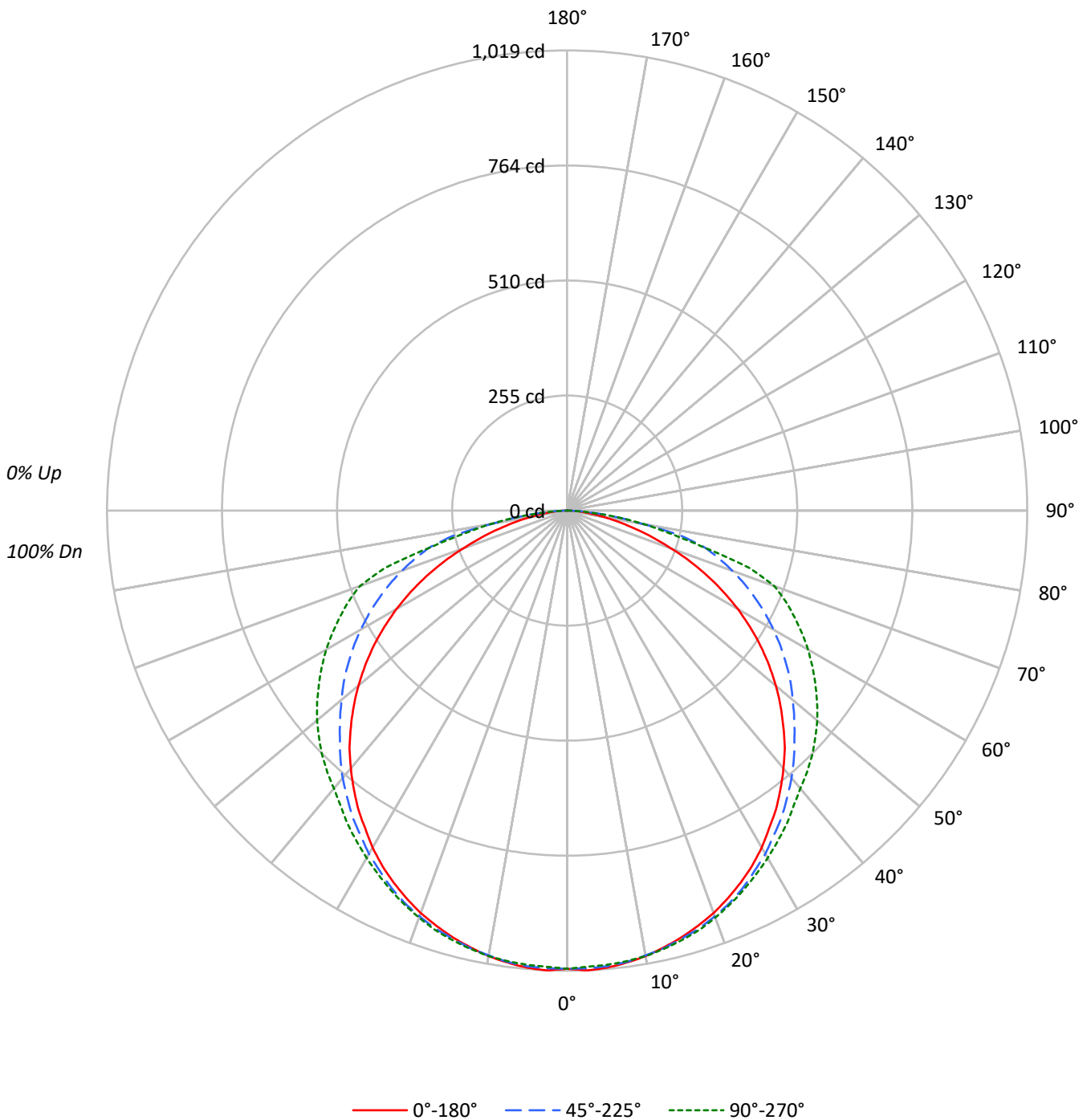
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1365	1365	1365
5°	1372	1368	1364
10°	1369	1367	1369
15°	1363	1367	1371
20°	1358	1369	1374
25°	1349	1368	1375
30°	1339	1363	1380
35°	1325	1361	1392
40°	1309	1358	1411
45°	1289	1355	1460
50°	1263	1365	1513
55°	1227	1389	1574
60°	1174	1420	1657
65°	1093	1465	1765
70°	967	1531	1921
75°	810	1638	1613
80°	647	1294	1343
85°	511	875	803



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	3.0
10°-20°	276.9	8.7
20°-30°	422.9	13.2
30°-40°	517.1	16.2
40°-50°	553.5	17.3
50°-60°	530.9	16.6
60°-70°	448.3	14.0
70°-80°	286.5	9.0
80°-90°	67.8	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°	796.1	24.9
0°-40°	1313.1	41.0
0°-60°	2397.5	74.9
0°-90°	3200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3200.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	1016	1010	1013	1011	1010	96
15°	978	975	981	984	984	276
25°	909	907	922	925	926	419
35°	806	813	829	840	848	504
45°	677	688	712	745	767	522
55°	523	540	592	646	671	467
65°	343	376	460	524	554	339
75°	156	222	315	321	310	168
85°	33	55	57	55	52	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1014.4	1014.4	1014.4	1014.4	1014.4
2.5°	1019.2	1012.9	1014.4	1014.4	1011.3
5°	1016.0	1009.7	1012.9	1011.3	1009.7
7.5°	1009.7	1005.0	1008.1	1008.1	1006.6
10°	1001.8	997.1	1000.2	1001.8	1001.8
12.5°	990.8	987.6	992.4	992.4	993.9
15°	978.2	975.0	981.3	984.5	984.5
17.5°	964.0	962.4	970.3	971.9	973.5
20°	948.3	946.7	956.1	956.1	959.3
22.5°	929.4	927.8	940.4	940.4	943.5
25°	908.9	907.3	921.5	924.6	926.2
27.5°	886.8	885.3	899.4	904.2	907.3
30°	861.6	861.6	877.4	883.7	888.4
32.5°	833.3	838.0	852.2	861.6	867.9
35°	806.5	812.8	828.6	839.6	847.5
37.5°	776.6	782.9	800.2	814.4	823.8
40°	745.1	752.9	773.4	789.2	803.4
42.5°	713.6	721.4	743.5	767.1	786.0
45°	677.3	688.4	712.0	745.1	767.1
47.5°	641.1	652.1	682.1	723.0	745.1
50°	603.3	615.9	652.1	699.4	723.0
52.5°	563.9	578.1	623.8	674.2	697.8
55°	523.0	540.3	592.3	645.8	671.0
57.5°	480.4	499.3	560.8	617.5	644.3
60°	436.3	460.0	527.7	587.5	615.9
62.5°	390.6	419.0	494.6	556.0	586.0
65°	343.4	376.5	460.0	524.5	554.5
67.5°	294.6	338.7	425.3	493.0	523.0
70°	245.7	297.7	389.1	458.4	488.3
72.5°	200.0	259.9	352.8	417.4	423.7
75°	155.9	222.1	315.0	321.3	310.3
77.5°	116.6	184.3	259.9	231.6	230.0
80°	83.5	148.1	167.0	171.7	173.3
82.5°	55.1	111.8	108.7	111.8	110.3
85°	33.1	55.1	56.7	55.1	52.0
87.5°	15.8	20.5	15.8	14.2	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)