

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: P260603

Luminaire Tested: **24CZ-LD5-30SE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30SE-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3033.0 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

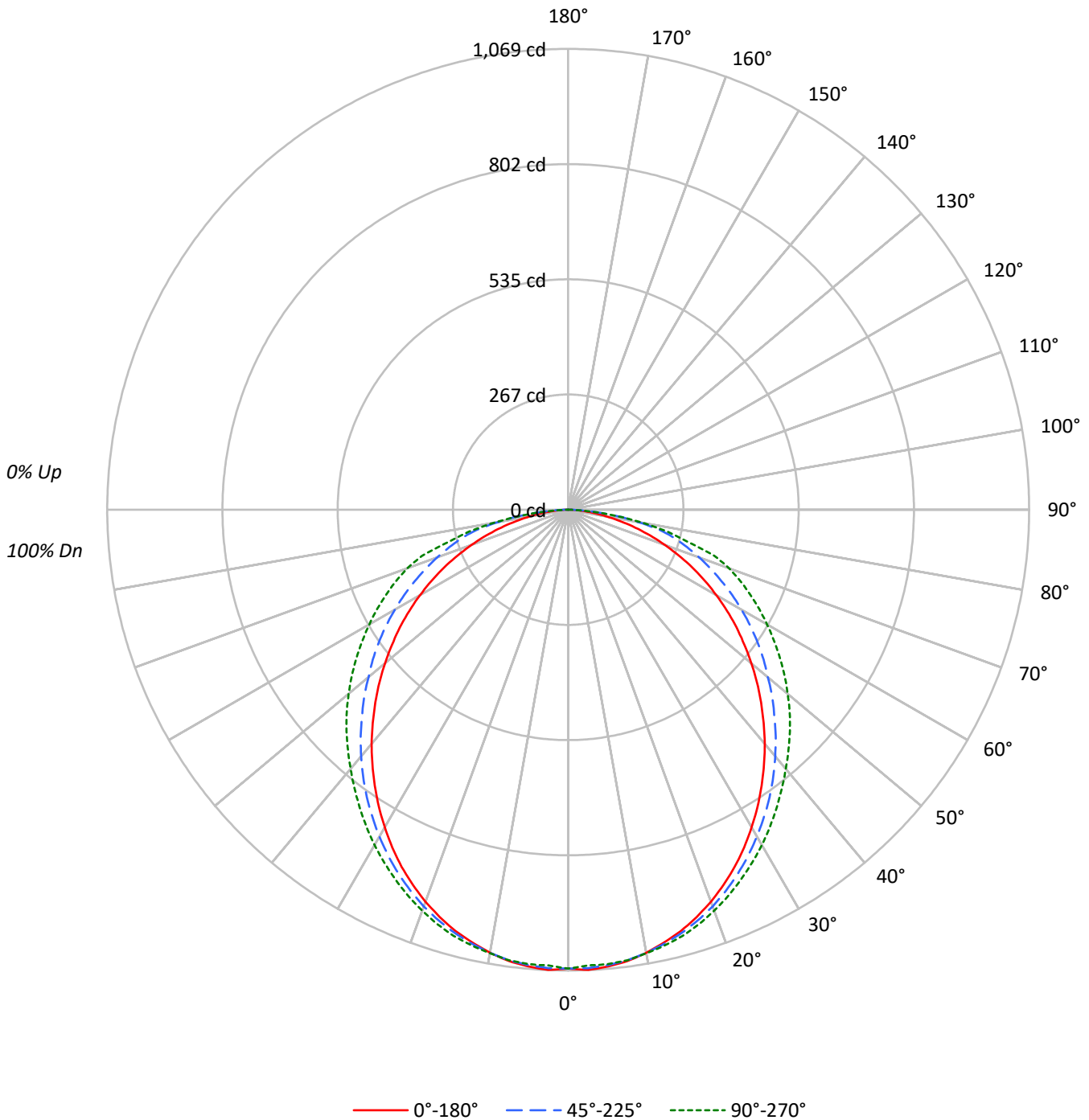
Input Watts (W): 21.762
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1432	1432	1432
5°	1436	1432	1429
10°	1426	1426	1427
15°	1409	1416	1426
20°	1386	1402	1417
25°	1357	1383	1406
30°	1321	1360	1396
35°	1284	1337	1385
40°	1246	1312	1379
45°	1203	1286	1383
50°	1161	1265	1391
55°	1118	1257	1406
60°	1068	1249	1433
65°	1012	1250	1481
70°	935	1271	1561
75°	837	1328	1485
80°	700	1272	1360
85°	530	977	929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	3.3
10°-20°	286.3	9.4
20°-30°	428.0	14.1
30°-40°	507.7	16.7
40°-50°	522.6	17.2
50°-60°	479.4	15.8
60°-70°	387.6	12.8
70°-80°	251.6	8.3
80°-90°	69.4	2.3
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°	814.8	26.9
0°-40°	1322.5	43.6
0°-60°	2324.5	76.6
0°-90°	3033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1056	1060	1059	1058	101
15°	1012	1007	1017	1021	1024	285
25°	914	915	932	940	947	421
35°	782	788	814	832	843	489
45°	632	643	676	708	727	488
55°	477	491	536	580	599	426
65°	318	336	392	444	465	314
75°	161	191	256	286	286	171
85°	34	58	63	61	60	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.4	1064.4	1064.4	1064.4	1064.4
2.5°	1068.6	1060.3	1064.4	1063.4	1058.2
5°	1063.4	1056.1	1060.3	1059.2	1058.2
7.5°	1056.1	1048.8	1054.0	1053.0	1054.0
10°	1043.7	1037.4	1043.7	1044.7	1044.7
12.5°	1028.1	1022.9	1031.2	1033.3	1035.3
15°	1011.5	1007.3	1016.7	1020.8	1023.9
17.5°	990.7	987.6	999.0	1004.2	1008.3
20°	967.8	966.8	979.3	984.5	989.7
22.5°	941.9	941.9	956.4	962.7	969.9
25°	913.8	914.9	931.5	939.8	947.1
27.5°	883.7	884.8	904.5	914.9	923.2
30°	850.5	854.7	875.4	888.9	898.3
32.5°	817.3	822.5	845.3	860.9	871.3
35°	782.0	788.2	814.2	831.8	843.2
37.5°	745.6	752.9	780.9	800.7	814.2
40°	709.3	717.6	746.7	769.5	785.1
42.5°	670.8	680.2	712.4	739.4	756.0
45°	632.4	642.8	676.0	708.2	726.9
47.5°	594.0	606.5	641.8	677.1	696.8
50°	554.5	567.0	604.4	644.9	664.6
52.5°	515.1	529.6	571.2	612.7	632.4
55°	476.7	491.2	535.8	579.5	599.2
57.5°	437.2	451.7	500.5	546.2	566.0
60°	396.7	413.3	464.2	510.9	532.7
62.5°	357.2	374.9	428.9	478.7	499.5
65°	317.8	336.5	392.5	444.5	465.2
67.5°	277.3	299.1	357.2	410.2	432.0
70°	237.8	261.7	323.0	375.9	396.7
72.5°	199.4	225.3	288.7	342.7	355.2
75°	161.0	191.1	255.5	285.6	285.6
77.5°	124.6	157.8	218.1	229.5	235.7
80°	90.3	126.7	164.1	177.6	175.5
82.5°	60.2	96.6	117.3	117.3	114.2
85°	34.3	58.2	63.3	61.3	60.2
87.5°	14.5	21.8	19.7	15.6	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)