

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: P219234

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-A19/156-UNV-L940-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2616.6 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

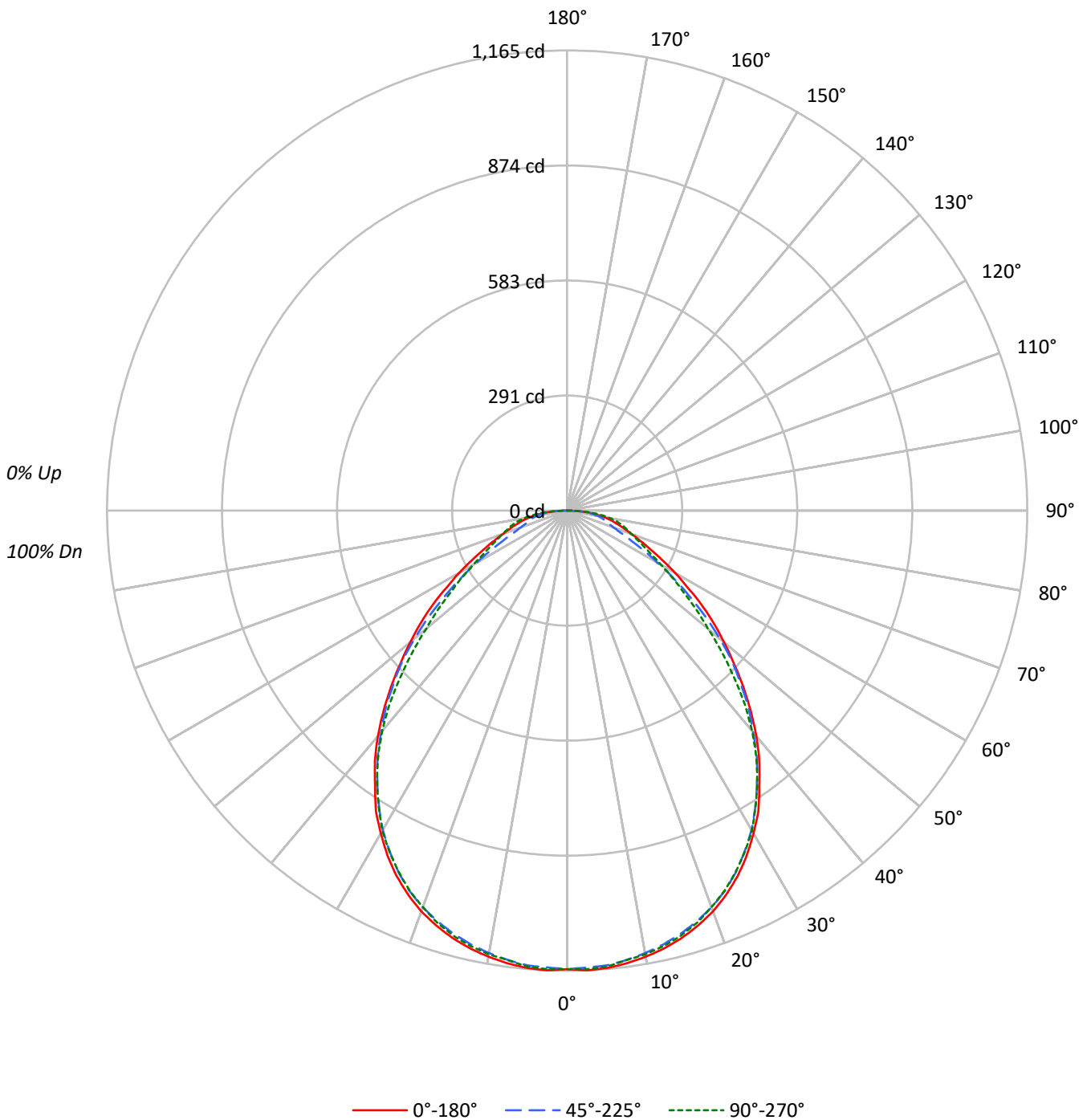
Input Watts (W): 23.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1778	1778	1778
5°	1787	1777	1781
10°	1784	1769	1774
15°	1777	1759	1766
20°	1760	1742	1741
25°	1726	1707	1706
30°	1669	1651	1655
35°	1585	1567	1569
40°	1490	1465	1456
45°	1366	1347	1294
50°	1235	1201	1111
55°	1108	1009	957
60°	971	812	842
65°	847	639	775
70°	775	558	775
75°	775	594	854
80°	841	699	973
85°	923	789	1044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	4.2
10°-20°	313.7	12.0
20°-30°	465.2	17.8
30°-40°	524.8	20.1
40°-50°	475.3	18.2
50°-60°	342.9	13.1
60°-70°	204.8	7.8
70°-80°	126.6	4.8
80°-90°	53.3	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°	888.9	34.0
0°-40°	1413.7	54.0
0°-60°	2232.0	85.3
0°-90°	2616.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2616.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1162	1161	1156	1154	1158	110
15°	1120	1114	1109	1110	1114	316
25°	1021	1015	1010	1006	1009	469
35°	848	846	838	838	839	530
45°	631	627	622	607	597	486
55°	415	402	378	359	358	371
65°	234	206	176	200	214	235
75°	131	114	100	125	144	140
85°	52	46	45	59	59	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.9	1160.9	1160.9	1160.9	1160.9
2.5°	1165.0	1161.8	1157.7	1160.1	1162.2
5°	1162.2	1160.6	1155.7	1154.5	1158.5
7.5°	1156.1	1152.1	1147.6	1149.6	1148.0
10°	1146.8	1143.2	1137.5	1138.0	1140.7
12.5°	1135.5	1131.1	1125.0	1126.6	1129.0
15°	1120.5	1113.6	1109.2	1109.6	1114.0
17.5°	1101.5	1096.2	1090.7	1091.9	1093.8
20°	1079.7	1076.9	1068.8	1066.4	1068.4
22.5°	1052.2	1047.0	1042.5	1041.3	1041.7
25°	1021.1	1015.4	1010.2	1006.5	1009.4
27.5°	984.7	979.9	973.0	971.8	974.2
30°	943.5	939.8	933.8	932.2	935.8
32.5°	901.5	895.3	886.9	886.9	887.7
35°	847.7	846.5	838.0	838.4	839.2
37.5°	799.2	793.5	788.6	783.8	786.2
40°	745.4	738.9	732.5	729.2	728.0
42.5°	687.6	682.8	679.9	668.2	665.4
45°	630.6	626.6	622.1	606.7	597.4
47.5°	572.4	571.6	567.9	540.9	531.6
50°	518.2	517.0	504.0	475.4	466.1
52.5°	466.9	458.8	441.8	413.5	411.9
55°	415.1	402.2	378.0	359.4	358.5
57.5°	360.6	345.2	320.5	310.5	315.7
60°	316.9	293.4	265.1	266.4	274.9
62.5°	271.7	245.4	217.5	229.6	239.7
65°	233.7	205.7	176.2	200.1	213.8
67.5°	200.5	174.7	146.4	178.3	191.6
70°	173.0	152.0	124.5	158.1	173.0
72.5°	151.2	131.8	110.3	141.9	159.3
75°	131.0	113.6	100.3	124.9	144.3
77.5°	113.6	96.6	90.6	110.3	129.3
80°	95.4	80.1	79.2	96.2	110.3
82.5°	74.4	63.9	63.9	80.4	88.9
85°	52.5	46.1	44.9	58.7	59.4
87.5°	27.1	25.9	23.5	30.7	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)