

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: P475686

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475686
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2973.7 lumens
Efficiency: N/A
Efficacy: 139.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

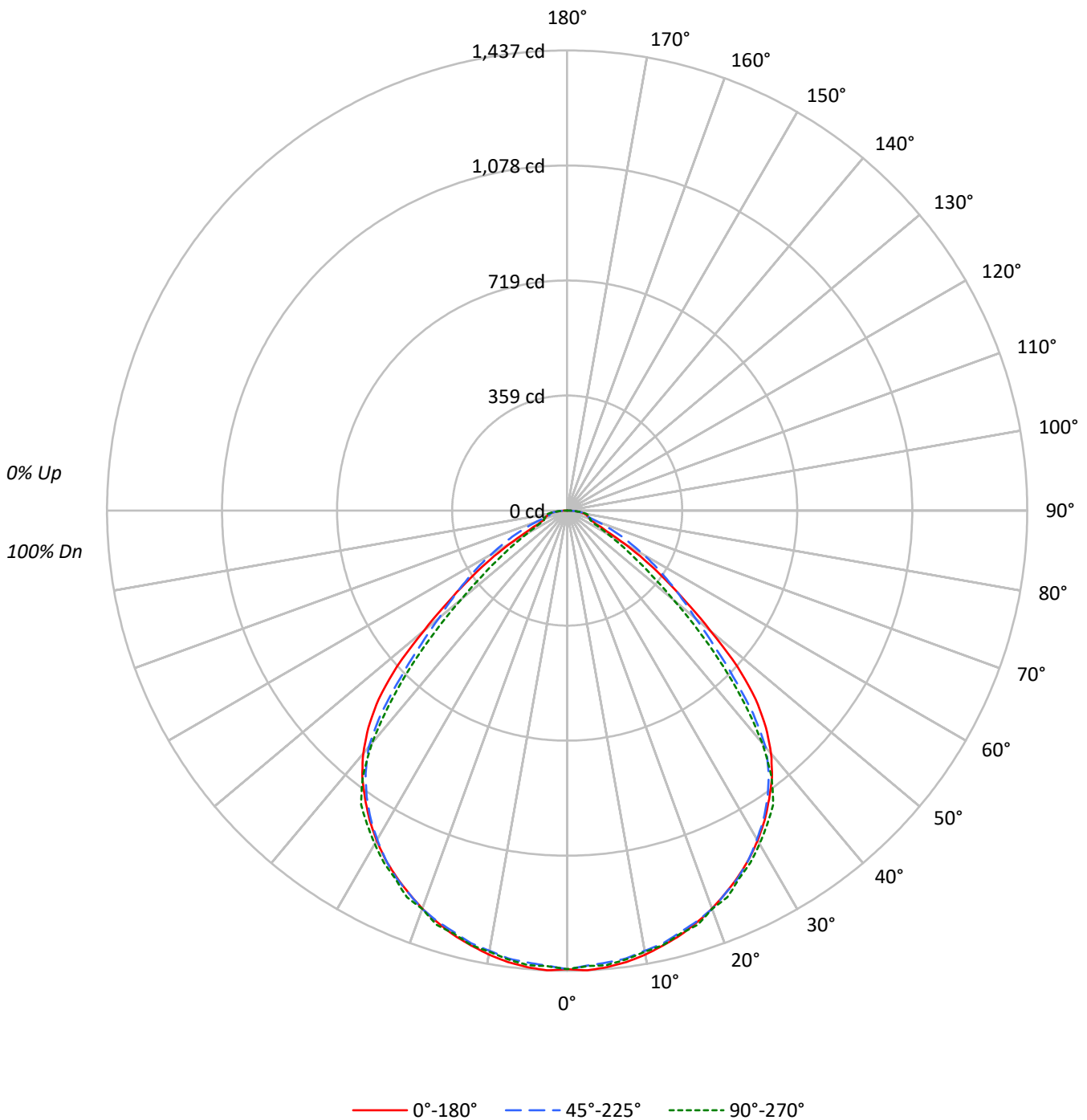
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1927	1927	1927
5°	1933	1914	1924
10°	1923	1907	1911
15°	1911	1899	1905
20°	1894	1896	1895
25°	1874	1877	1884
30°	1848	1842	1867
35°	1806	1793	1842
40°	1740	1695	1664
45°	1584	1394	1315
50°	1222	1093	904
55°	869	912	598
60°	550	737	390
65°	319	579	285
70°	295	399	303
75°	340	304	360
80°	425	420	477
85°	463	491	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.9	4.5
10°-20°	386.0	13.0
20°-30°	582.4	19.6
30°-40°	683.6	23.0
40°-50°	575.5	19.4
50°-60°	326.9	11.0
60°-70°	163.2	5.5
70°-80°	85.5	2.9
80°-90°	35.7	1.2
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°	1103.3	37.1
0°-40°	1787.0	60.1
0°-60°	2689.4	90.4
0°-90°	2973.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2973.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1432	1432	1432	1432	1432	
5°	1431	1421	1417	1420	1424	136
15°	1372	1368	1363	1367	1368	387
25°	1262	1263	1265	1268	1269	581
35°	1100	1094	1091	1110	1122	687
45°	832	799	733	720	691	627
55°	370	396	389	335	255	337
65°	100	208	182	154	90	114
75°	65	101	58	88	69	69
85°	30	36	32	40	33	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1432.0	1432.0	1432.0	1432.0	1432.0
2.5°	1437.1	1430.2	1422.3	1420.2	1423.8
5°	1431.1	1420.8	1417.1	1419.6	1424.4
7.5°	1421.7	1411.1	1410.5	1406.2	1413.5
10°	1407.8	1400.8	1395.7	1398.1	1399.0
12.5°	1390.2	1388.1	1384.1	1380.8	1389.0
15°	1371.7	1368.4	1363.0	1366.6	1367.5
17.5°	1348.1	1346.3	1345.4	1348.1	1356.0
20°	1323.0	1323.0	1323.9	1324.5	1323.3
22.5°	1293.0	1292.1	1293.3	1295.7	1307.3
25°	1262.4	1263.1	1264.6	1267.9	1268.8
27.5°	1228.5	1228.8	1228.2	1231.6	1239.4
30°	1189.5	1188.3	1185.9	1193.1	1201.6
32.5°	1147.1	1144.7	1142.0	1153.2	1162.2
35°	1099.6	1093.5	1091.4	1109.9	1121.7
37.5°	1050.8	1038.4	1033.9	1047.5	1049.0
40°	990.9	972.4	964.8	951.5	947.6
42.5°	918.8	899.8	858.9	838.3	823.8
45°	832.5	799.2	732.6	719.9	691.2
47.5°	721.1	685.7	619.1	591.9	559.2
50°	584.0	563.4	522.2	488.3	431.7
52.5°	466.8	471.1	451.7	404.8	334.5
55°	370.3	396.0	388.7	335.1	254.9
57.5°	284.9	340.3	331.5	275.8	194.7
60°	204.4	291.5	273.7	227.1	145.0
62.5°	140.2	248.9	224.3	187.4	111.1
65°	100.2	207.7	181.9	154.4	89.6
67.5°	82.3	169.8	139.6	131.1	78.1
70°	75.1	136.8	101.4	114.4	76.9
72.5°	71.4	114.7	74.5	100.2	73.3
75°	65.4	100.8	58.4	87.8	69.3
77.5°	60.5	87.2	54.5	76.9	67.5
80°	54.8	69.0	54.2	65.1	61.5
82.5°	44.2	50.3	45.7	53.3	49.7
85°	30.0	35.7	31.8	40.3	33.0
87.5°	14.8	17.6	14.2	19.1	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)