

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: SHAPER

Report Number: 18806

Luminaire Tested: **695-24-1MH/100W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 18806
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 695-24-1MH/100W
Description: WALL MOUNT HID LUMINAIRE WITH WHITE INTERIOR AND FLAT CLEAR GLASS LENS
Light Source: ONE VENTURE 100 WATT MH LAMP

MH100W/U. LUMEN RATING = 8100 LMS.

Ballast/Driver: -

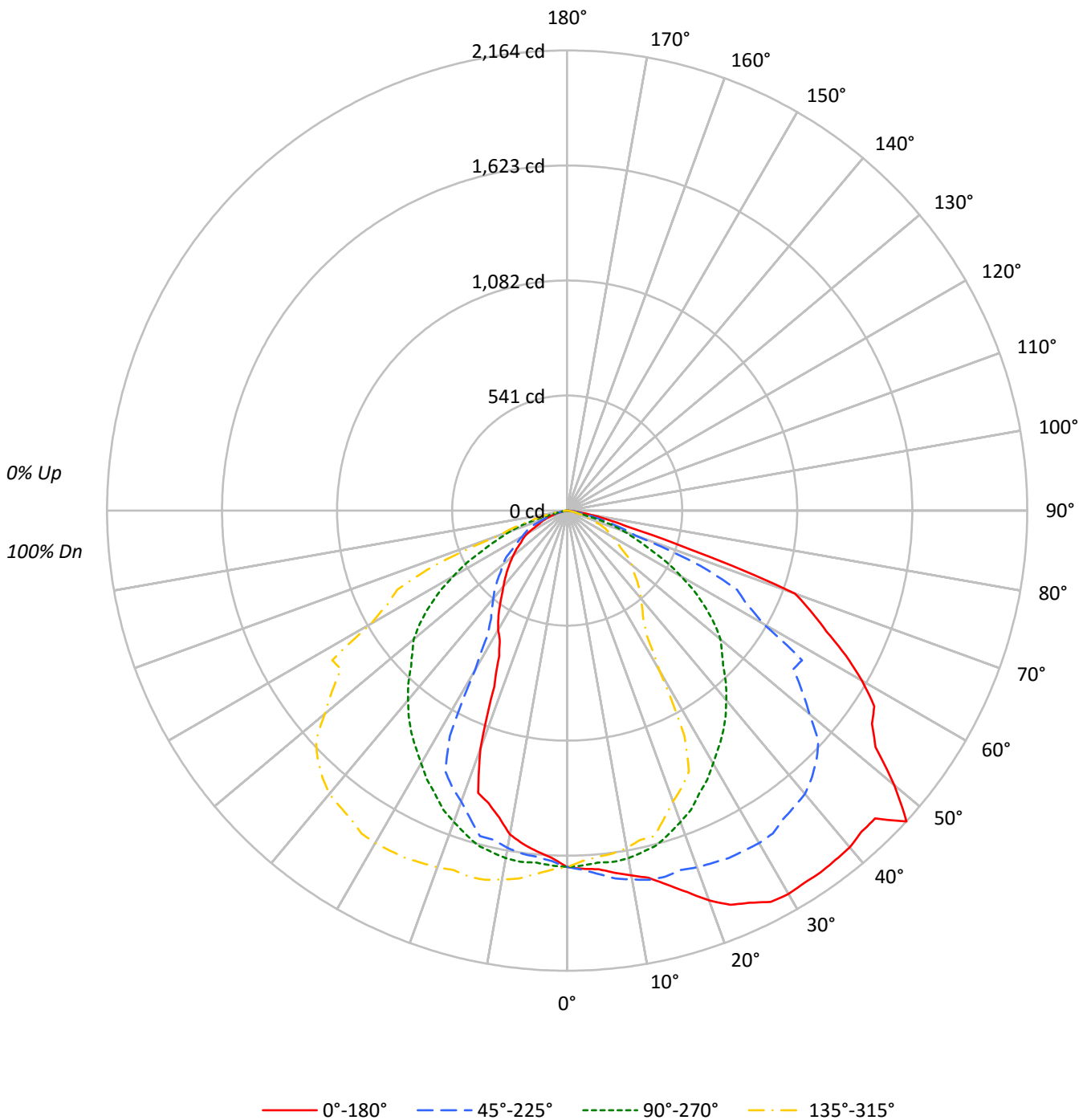
Summary

Lumens per Lamp: 8100 (1 lamp)
Luminaire Lumens: 4390.6 lumens
Efficiency: 54.2%
Efficacy: -
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.36
Luminous Opening: Rectangular (W 0.58' x L: 1.08' x H: 0')
CIE Type: Direct

Input Watts (W): 0
Input Voltage (V): NR
Input Current (A_{in}): 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	65	65	65	65	63	63	63	63	60	60	60	58	58	58	55	55	55	54
1	60	57	55	53	58	56	54	53	54	52	51	52	50	49	50	49	48	47
2	55	50	47	44	53	49	46	44	47	45	43	46	44	42	44	42	41	40
3	50	44	40	37	49	44	40	37	42	39	36	41	38	35	39	37	35	34
4	46	39	35	31	44	39	35	31	37	34	31	36	33	30	35	32	30	29
5	42	35	31	27	41	35	30	27	34	30	27	33	29	26	32	29	26	25
6	39	32	27	24	38	31	27	24	30	26	23	29	26	23	29	25	23	22
7	36	29	24	21	35	28	24	21	28	24	21	27	23	21	26	23	20	19
8	34	26	22	19	33	26	22	19	25	21	19	25	21	18	24	21	18	17
9	31	24	20	17	31	24	20	17	23	19	17	23	19	17	22	19	17	16
10	29	22	18	15	29	22	18	15	22	18	15	21	18	15	21	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	28793	28793	28793	28793
5°	29196	28670	27763	28670
10°	30391	28965	26992	28965
15°	32392	28976	25358	28976
20°	35681	28494	21805	28494
25°	38573	27862	14340	27862
30°	41309	27245	12850	27245
35°	43577	26780	11615	26780
40°	46371	26102	10458	26102
45°	49765	25232	9648	25232
50°	53712	25172	8886	25172
55°	52413	23808	8035	23808
60°	55022	21284	7475	21284
65°	54745	17382	5786	17382
70°	57301	14153	4763	14153
75°	19885	6719	3114	6719
80°	10767	2573	1227	2573
85°	3076	670	237	670



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	158.9	3.6	2.0
10°-20°	464.4	10.6	5.7
20°-30°	680.2	15.5	8.4
30°-40°	803.3	18.3	9.9
40°-50°	851.5	19.4	10.5
50°-60°	745.3	17.0	9.2
60°-70°	521.8	11.9	6.4
70°-80°	151.9	3.5	1.9
80°-90°	13.3	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	1303.5	29.7	16.1
0°-40°	2106.8	48.0	26.0
0°-60°	3703.7	84.4	45.7
0°-90°	4390.6	100.0	54.2
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	4390.6	100.0	54.2

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1676	1676	1676	1676	1676	
5°	1693	1662	1610	1662	1693	163
15°	1821	1629	1425	1629	1821	522
25°	2034	1470	756	1470	2034	943
35°	2077	1277	554	1277	2077	1303
45°	2048	1038	397	1038	2048	1607
55°	1750	795	268	795	1750	1588
65°	1346	428	142	428	1346	1346
75°	300	101	47	101	300	450
85°	16	3	1	3	16	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6
2.5°	1686.5	1692.0	1690.8	1673.7	1670.6	1642.4	1650.1	1645.8	1634.6	1645.8	1650.1
5°	1692.6	1707.7	1715.9	1684.9	1662.1	1630.0	1634.6	1613.8	1609.5	1613.8	1634.6
7.5°	1717.8	1721.0	1745.6	1707.0	1666.4	1617.3	1627.3	1597.8	1582.1	1597.8	1627.3
10°	1741.7	1738.3	1761.6	1717.1	1660.0	1609.9	1611.1	1568.1	1546.9	1568.1	1611.1
12.5°	1768.5	1766.6	1778.5	1715.5	1644.3	1604.0	1586.6	1533.0	1477.9	1533.0	1586.6
15°	1820.8	1809.6	1782.9	1702.0	1628.8	1583.2	1584.4	1480.7	1425.4	1480.7	1584.4
17.5°	1881.5	1838.1	1772.8	1665.2	1593.5	1561.5	1517.4	1457.1	1392.0	1457.1	1517.4
20°	1951.2	1877.2	1785.1	1634.6	1558.2	1482.3	1455.5	1393.6	1192.4	1393.6	1455.5
22.5°	2006.5	1924.0	1792.9	1615.7	1522.5	1439.3	1409.2	1092.6	895.7	1092.6	1409.2
25°	2034.4	1941.4	1801.8	1575.5	1469.5	1403.7	1354.6	826.0	756.3	826.0	1354.6
27.5°	2074.1	1972.0	1803.0	1534.8	1426.3	1364.6	1194.0	713.9	685.5	713.9	1194.0
30°	2081.9	1996.0	1805.7	1512.0	1373.1	1312.3	866.7	672.1	647.6	672.1	866.7
32.5°	2075.7	2011.5	1800.2	1506.2	1323.7	1243.6	695.4	614.5	602.4	614.5	695.4
35°	2077.3	2017.2	1771.2	1475.6	1276.6	1193.5	624.1	567.2	553.7	567.2	624.1
37.5°	2071.8	1993.2	1755.0	1451.7	1222.8	1137.1	580.0	524.7	504.2	524.7	580.0
40°	2067.2	1958.5	1739.5	1431.1	1163.6	1081.8	540.9	489.1	466.2	489.1	540.9
42.5°	2049.0	1928.4	1702.7	1380.8	1105.7	1006.7	504.2	446.1	431.1	446.1	504.2
45°	2047.8	1903.5	1658.6	1318.9	1038.3	789.7	463.5	412.1	397.0	412.1	463.5
47.5°	2164.3	1866.5	1602.2	1242.0	987.4	587.8	421.7	378.1	364.1	378.1	421.7
50°	2009.2	1949.2	1488.0	1187.8	941.6	468.5	397.7	348.6	332.4	348.6	397.7
52.5°	1827.6	1700.4	1392.0	1082.5	872.7	421.0	361.4	330.1	301.8	330.1	361.4
55°	1749.5	1503.5	1298.8	992.1	794.7	371.0	310.0	286.0	268.2	286.0	310.0
57.5°	1712.7	1438.9	1310.0	905.0	712.7	324.6	276.7	241.5	245.4	241.5	276.7
60°	1601.0	1318.5	1064.7	785.8	619.3	286.7	245.4	210.2	217.5	210.2	245.4
62.5°	1478.4	1205.2	950.3	711.1	529.9	251.5	218.2	186.2	172.3	186.2	218.2
65°	1346.4	1106.5	881.7	647.6	427.5	220.9	197.4	155.1	142.3	155.1	197.4
67.5°	1241.5	1009.0	678.2	506.9	348.3	185.3	153.3	124.3	121.1	124.3	153.3
70°	1140.5	499.8	342.0	345.2	281.7	152.9	114.5	97.1	94.8	97.1	114.5
72.5°	600.1	325.8	256.6	220.2	210.0	117.7	82.0	71.5	68.6	71.5	82.0
75°	299.5	227.1	167.2	147.8	101.2	85.5	56.5	48.5	46.9	48.5	56.5
77.5°	190.8	145.1	106.0	75.4	49.5	54.6	35.2	29.1	26.8	29.1	35.2
80°	108.8	83.6	60.8	41.4	26.0	31.3	21.7	15.1	12.4	15.1	21.7
82.5°	49.2	37.5	26.8	17.9	11.2	15.1	9.6	5.5	3.9	5.5	9.6
85°	15.6	13.5	10.1	5.5	3.4	4.6	2.8	1.6	1.2	1.6	2.8
87.5°	5.5	5.5	3.9	2.3	0.8	1.2	1.2	0.5	0.5	0.5	1.2
90°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1675.6	1675.6	1675.6	1675.6	1675.6	1675.6
2.5°	1642.4	1670.6	1673.7	1690.8	1692.0	1686.5
5°	1630.0	1662.1	1684.9	1715.9	1707.7	1692.6
7.5°	1617.3	1666.4	1707.0	1745.6	1721.0	1717.8
10°	1609.9	1660.0	1717.1	1761.6	1738.3	1741.7
12.5°	1604.0	1644.3	1715.5	1778.5	1766.6	1768.5
15°	1583.2	1628.8	1702.0	1782.9	1809.6	1820.8
17.5°	1561.5	1593.5	1665.2	1772.8	1838.1	1881.5
20°	1482.3	1558.2	1634.6	1785.1	1877.2	1951.2
22.5°	1439.3	1522.5	1615.7	1792.9	1924.0	2006.5
25°	1403.7	1469.5	1575.5	1801.8	1941.4	2034.4
27.5°	1364.6	1426.3	1534.8	1803.0	1972.0	2074.1
30°	1312.3	1373.1	1512.0	1805.7	1996.0	2081.9
32.5°	1243.6	1323.7	1506.2	1800.2	2011.5	2075.7
35°	1193.5	1276.6	1475.6	1771.2	2017.2	2077.3
37.5°	1137.1	1222.8	1451.7	1755.0	1993.2	2071.8
40°	1081.8	1163.6	1431.1	1739.5	1958.5	2067.2
42.5°	1006.7	1105.7	1380.8	1702.7	1928.4	2049.0
45°	789.7	1038.3	1318.9	1658.6	1903.5	2047.8
47.5°	587.8	987.4	1242.0	1602.2	1866.5	2164.3
50°	468.5	941.6	1187.8	1488.0	1949.2	2009.2
52.5°	421.0	872.7	1082.5	1392.0	1700.4	1827.6
55°	371.0	794.7	992.1	1298.8	1503.5	1749.5
57.5°	324.6	712.7	905.0	1310.0	1438.9	1712.7
60°	286.7	619.3	785.8	1064.7	1318.5	1601.0
62.5°	251.5	529.9	711.1	950.3	1205.2	1478.4
65°	220.9	427.5	647.6	881.7	1106.5	1346.4
67.5°	185.3	348.3	506.9	678.2	1009.0	1241.5
70°	152.9	281.7	345.2	342.0	499.8	1140.5
72.5°	117.7	210.0	220.2	256.6	325.8	600.1
75°	85.5	101.2	147.8	167.2	227.1	299.5
77.5°	54.6	49.5	75.4	106.0	145.1	190.8
80°	31.3	26.0	41.4	60.8	83.6	108.8
82.5°	15.1	11.2	17.9	26.8	37.5	49.2
85°	4.6	3.4	5.5	10.1	13.5	15.6
87.5°	1.2	0.8	2.3	3.9	5.5	5.5
90°	0.5	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)