

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: 16793

Luminaire Tested: **982-PT-HID-100W-120HPF-NB2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 16793
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 982-PT-HID-100W-120HPF-NB2
Description: POST TOP HID LUMINAIRE WITH WHITE INTERIOR AND FLAT LINEAR PRISMATIC GLASS LENS
Light Source: ONE VENTURE 100 WATT MH LAMP

MH100W/U. LUMEN RATING = 8100 LMS.

Ballast/Driver: -

Summary

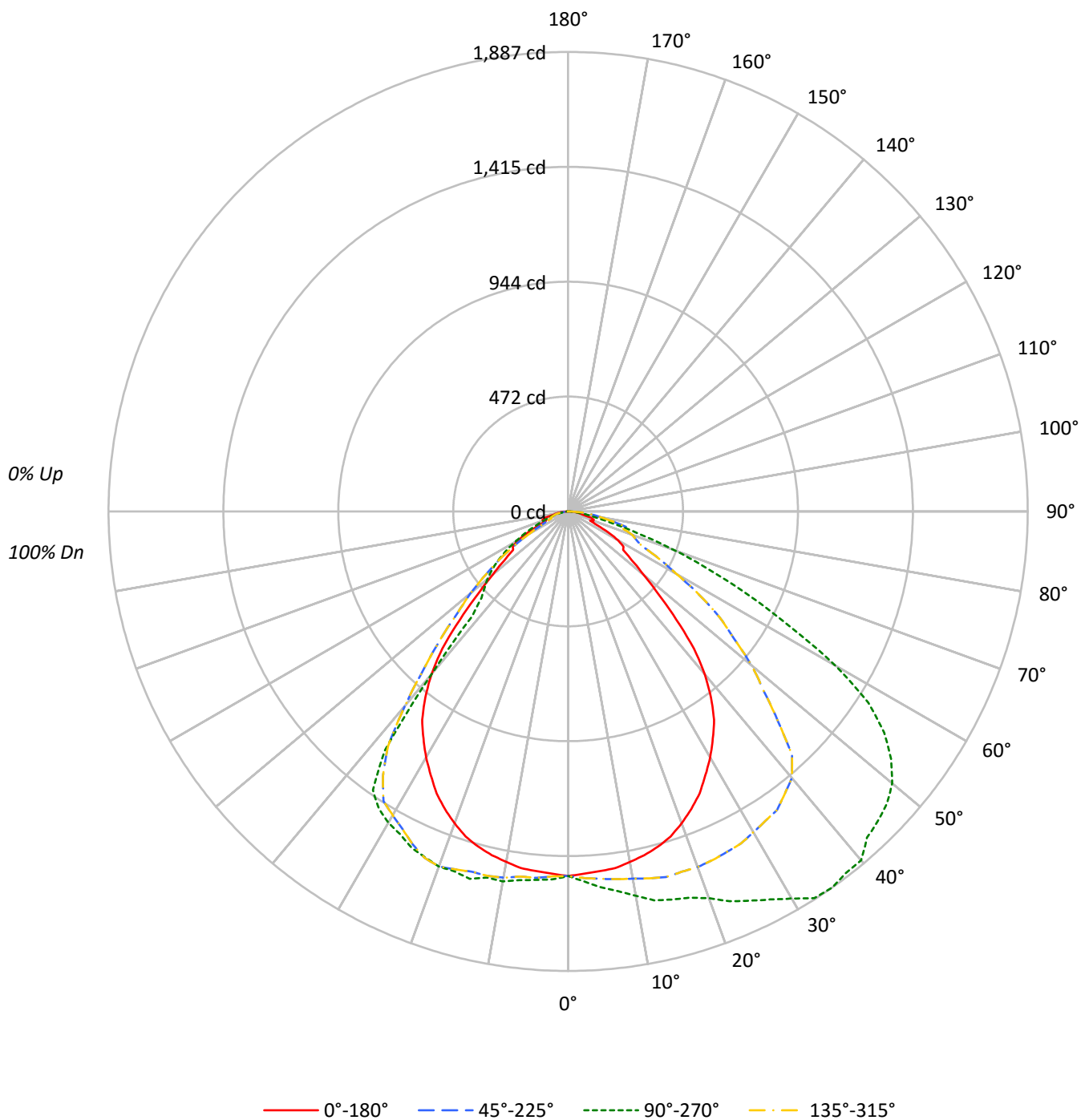
Lumens per Lamp: 8100 (1 lamp)
Luminaire Lumens: 3826.3 lumens
Efficiency: 47.2%
Efficacy: -
Spacing Criteria (0/90/45): 1.17 / 1.56 / 1.37
Luminous Opening: Rectangular (W 0.75' x L: 0.81' x H: 0')
CIE Type: Direct

Input Watts (W): 0
Input Voltage (V): NR
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	56	56	56	56	55	55	55	55	52	52	52	50	50	50	48	48	48
1	52	50	48	47	51	49	48	46	47	46	45	45	44	43	44	43	42
2	48	45	42	39	47	44	41	39	42	40	38	41	39	37	39	38	36
3	44	40	36	33	43	39	36	33	38	35	33	36	34	32	35	33	32
4	41	36	32	29	40	35	31	29	34	31	28	33	30	28	32	29	28
5	38	32	28	25	37	32	28	25	31	27	25	30	27	25	29	26	24
6	35	29	25	22	34	29	25	22	28	24	22	27	24	22	26	24	22
7	32	26	23	20	32	26	22	20	25	22	20	25	22	19	24	21	19
8	30	24	20	18	30	24	20	18	23	20	18	23	20	18	22	19	17
9	28	22	19	16	28	22	18	16	21	18	16	21	18	16	21	18	16
10	27	21	17	15	26	20	17	15	20	17	15	19	17	14	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	26526	26526	26526	26526
5°	26371	27563	26371	27008
10°	26289	28835	26289	27759
15°	26139	30265	26139	28643
20°	25694	31856	25694	29252
25°	24969	34478	24969	29769
30°	23856	37547	23856	30188
35°	22597	40807	22597	30222
40°	20188	43266	20188	20100
45°	15739	45059	15739	12594
50°	11136	47872	11136	11927
55°	8510	48938	8510	10815
60°	8377	45005	8377	9004
65°	5123	34525	5123	6943
70°	5745	24027	5745	5263
75°	6380	13007	6380	3841
80°	5204	8040	5204	2633
85°	4818	5591	4818	1809

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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	144.6	3.8	1.8
10°-20°	433.1	11.3	5.3
20°-30°	690.4	18.0	8.5
30°-40°	854.9	22.3	10.6
40°-50°	742.7	19.4	9.2
50°-60°	499.7	13.1	6.2
60°-70°	282.8	7.4	3.5
70°-80°	143.0	3.7	1.8
80°-90°	35.1	0.9	0.4
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°	1268.0	33.1	15.7
0°-40°	2122.9	55.5	26.2
0°-60°	3365.3	88.0	41.5
0°-90°	3826.3	100.0	47.2
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°	3826.3	100.0	47.2

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1497	1497	1497	1497	1497	
5°	1483	1550	1483	1518	1483	141
15°	1425	1650	1425	1562	1425	401
25°	1277	1764	1277	1523	1277	586
35°	1045	1887	1045	1397	1045	646
45°	628	1798	628	503	628	485
55°	276	1584	276	350	276	267
65°	122	824	122	166	122	143
75°	93	190	93	56	93	91
85°	24	28	24	9	24	26
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°	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1
2.5°	1489.0	1498.3	1506.7	1514.3	1521.0	1514.3	1506.7	1498.3	1489.0	1502.5	1500.0
5°	1482.7	1500.0	1514.3	1532.8	1549.7	1532.8	1514.3	1500.0	1482.7	1500.0	1510.1
7.5°	1477.6	1498.3	1522.7	1542.9	1572.4	1542.9	1522.7	1498.3	1477.6	1500.0	1512.6
10°	1461.2	1489.9	1531.1	1569.9	1602.7	1569.9	1531.1	1489.9	1461.2	1504.2	1526.9
12.5°	1445.6	1475.5	1542.9	1605.3	1635.6	1605.3	1542.9	1475.5	1445.6	1504.2	1532.8
15°	1425.0	1457.0	1553.9	1621.3	1649.9	1621.3	1553.9	1457.0	1425.0	1495.8	1531.1
17.5°	1399.3	1436.8	1551.4	1623.8	1662.6	1623.8	1551.4	1436.8	1399.3	1498.3	1541.2
20°	1362.7	1409.8	1553.9	1635.6	1689.5	1635.6	1553.9	1409.8	1362.7	1488.2	1551.4
22.5°	1322.2	1378.7	1549.7	1671.0	1732.5	1671.0	1549.7	1378.7	1322.2	1471.3	1539.6
25°	1277.2	1341.6	1542.9	1701.3	1763.6	1701.3	1542.9	1341.6	1277.2	1440.2	1508.4
27.5°	1220.7	1302.9	1537.0	1732.5	1796.5	1732.5	1537.0	1302.9	1220.7	1425.8	1471.3
30°	1166.0	1259.9	1521.0	1755.2	1835.2	1755.2	1521.0	1259.9	1166.0	1391.3	1440.2
32.5°	1105.3	1218.6	1506.7	1783.9	1882.4	1783.9	1506.7	1218.6	1105.3	1335.7	1409.8
35°	1044.7	1183.2	1495.8	1773.8	1886.6	1773.8	1495.8	1183.2	1044.7	1267.5	1325.6
37.5°	963.4	1136.1	1461.2	1773.8	1872.3	1773.8	1461.2	1136.1	963.4	1193.3	1214.4
40°	872.8	1031.6	1428.4	1746.8	1870.6	1746.8	1428.4	1031.6	872.8	1093.1	1041.7
42.5°	765.0	936.4	1360.1	1699.6	1816.7	1699.6	1360.1	936.4	765.0	961.7	874.9
45°	628.1	827.7	1218.6	1668.5	1798.2	1668.5	1218.6	827.7	628.1	860.6	739.3
47.5°	502.6	703.9	1086.4	1578.3	1775.4	1578.3	1086.4	703.9	502.6	687.9	612.1
50°	404.0	572.5	983.6	1428.4	1736.7	1428.4	983.6	572.5	404.0	525.3	523.6
52.5°	329.9	475.6	858.1	1247.3	1671.0	1247.3	858.1	475.6	329.9	412.4	424.2
55°	275.5	398.1	759.5	1070.3	1584.2	1070.3	759.5	398.1	275.5	319.8	342.5
57.5°	269.2	335.8	640.7	943.1	1461.2	943.1	640.7	335.8	269.2	255.7	260.0
60°	236.4	324.0	512.7	813.4	1270.0	813.4	512.7	324.0	236.4	247.3	185.8
62.5°	185.0	274.3	420.0	726.6	1031.6	726.6	420.0	274.3	185.0	218.7	130.2
65°	122.2	228.8	331.6	640.7	823.5	640.7	331.6	228.8	122.2	202.7	93.2
67.5°	97.4	158.9	301.2	539.6	632.3	539.6	301.2	158.9	97.4	130.2	74.6
70°	110.9	126.0	280.2	441.1	463.8	441.1	280.2	126.0	110.9	95.7	77.2
72.5°	110.0	137.0	235.5	361.0	301.2	361.0	235.5	137.0	110.0	138.7	68.7
75°	93.2	128.5	245.6	324.0	190.0	324.0	245.6	128.5	93.2	91.5	60.3
77.5°	62.4	118.4	181.6	228.8	120.1	228.8	181.6	118.4	62.4	81.4	50.2
80°	51.0	87.3	134.4	140.3	78.8	140.3	134.4	87.3	51.0	54.4	31.7
82.5°	38.8	62.8	101.6	95.7	48.5	95.7	101.6	62.8	38.8	30.0	19.0
85°	23.7	37.6	64.5	58.6	27.5	58.6	64.5	37.6	23.7	13.1	11.5
87.5°	8.1	15.7	27.5	23.2	13.1	23.2	27.5	15.7	8.1	4.7	4.7
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°	1497.1	1497.1	1497.1	1497.1	1497.1	1497.1
2.5°	1506.7	1512.6	1506.7	1500.0	1502.5	1489.0
5°	1521.0	1518.5	1521.0	1510.1	1500.0	1482.7
7.5°	1524.4	1526.9	1524.4	1512.6	1500.0	1477.6
10°	1539.6	1542.9	1539.6	1526.9	1504.2	1461.2
12.5°	1545.5	1539.6	1545.5	1532.8	1504.2	1445.6
15°	1564.0	1561.5	1564.0	1531.1	1495.8	1425.0
17.5°	1558.1	1549.7	1558.1	1541.2	1498.3	1399.3
20°	1551.4	1551.4	1551.4	1551.4	1488.2	1362.7
22.5°	1522.7	1537.0	1522.7	1539.6	1471.3	1322.2
25°	1506.7	1522.7	1506.7	1508.4	1440.2	1277.2
27.5°	1489.9	1494.1	1489.9	1471.3	1425.8	1220.7
30°	1461.2	1475.5	1461.2	1440.2	1391.3	1166.0
32.5°	1444.4	1446.9	1444.4	1409.8	1335.7	1105.3
35°	1388.8	1397.2	1388.8	1325.6	1267.5	1044.7
37.5°	1195.9	1237.1	1195.9	1214.4	1193.3	963.4
40°	1010.5	869.0	1010.5	1041.7	1093.1	872.8
42.5°	840.4	582.6	840.4	874.9	961.7	765.0
45°	623.9	502.6	623.9	739.3	860.6	628.1
47.5°	482.4	465.5	482.4	612.1	687.9	502.6
50°	405.7	432.7	405.7	523.6	525.3	404.0
52.5°	338.3	393.9	338.3	424.2	412.4	329.9
55°	270.1	350.1	270.1	342.5	319.8	275.5
57.5°	221.2	302.9	221.2	260.0	255.7	269.2
60°	181.6	254.1	181.6	185.8	247.3	236.4
62.5°	153.0	208.6	153.0	130.2	218.7	185.0
65°	134.4	165.6	134.4	93.2	202.7	122.2
67.5°	118.4	130.2	118.4	74.6	130.2	97.4
70°	95.7	101.6	95.7	77.2	95.7	110.9
72.5°	74.6	77.2	74.6	68.7	138.7	110.0
75°	60.3	56.1	60.3	60.3	91.5	93.2
77.5°	48.5	37.6	48.5	50.2	81.4	62.4
80°	35.9	25.8	35.9	31.7	54.4	51.0
82.5°	21.6	15.7	21.6	19.0	30.0	38.8
85°	11.5	8.9	11.5	11.5	13.1	23.7
87.5°	4.7	3.0	4.7	4.7	4.7	8.1
90°	0.5	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)