

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: STREETWORKS

Report Number: P573568

Luminaire Tested: **ARCH-S-PA2-90-740-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-90-740-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9411 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

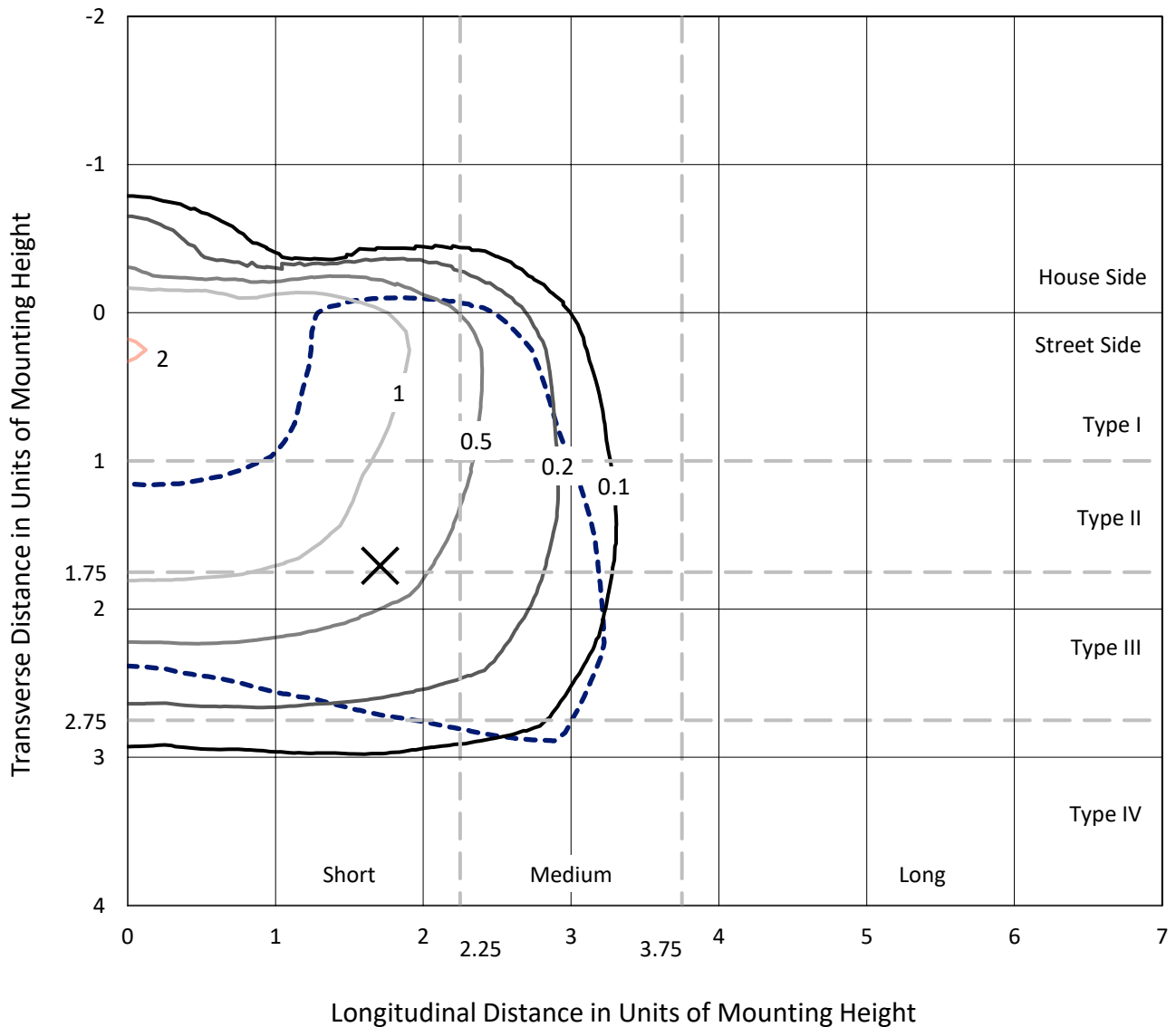
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

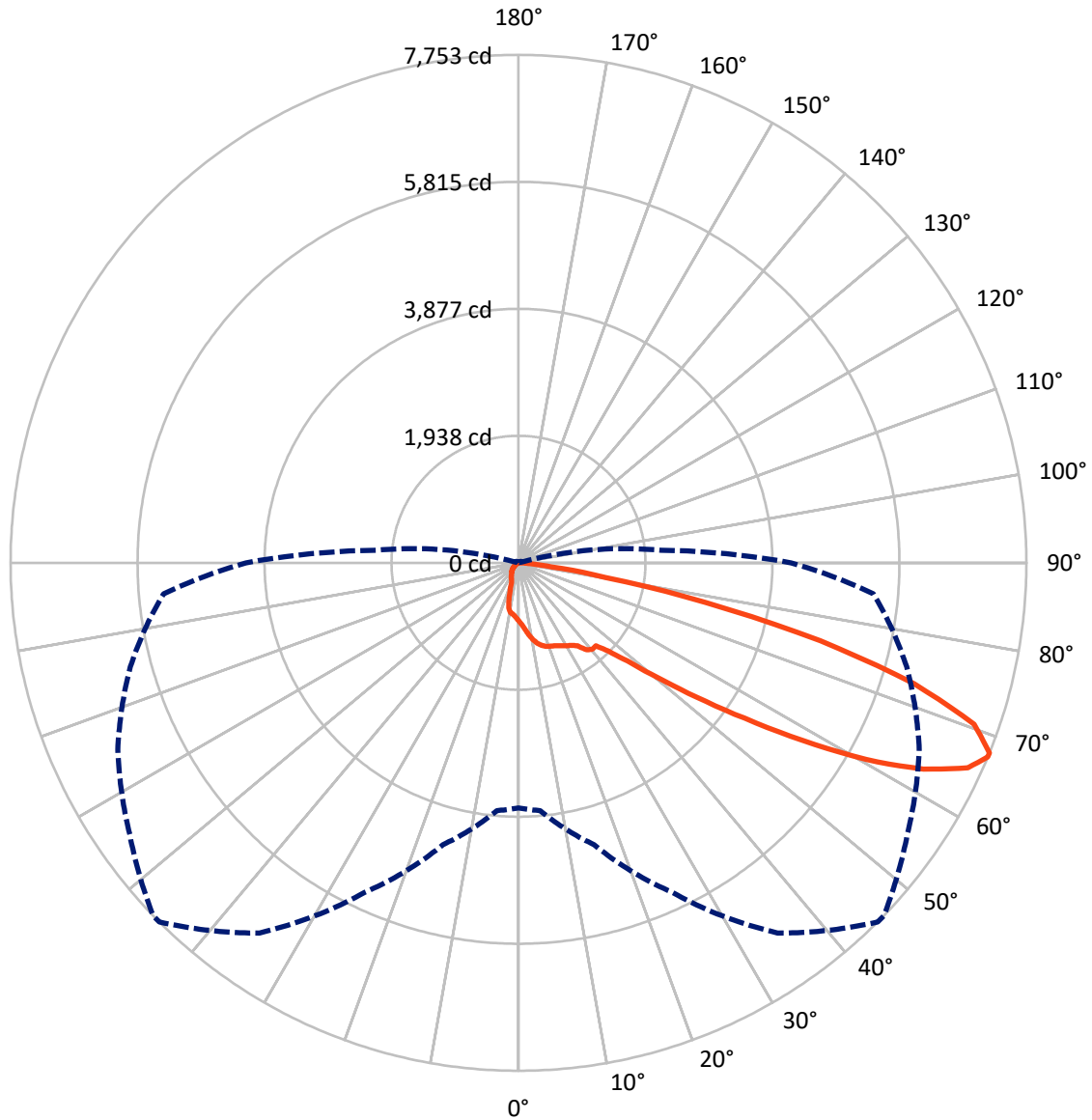
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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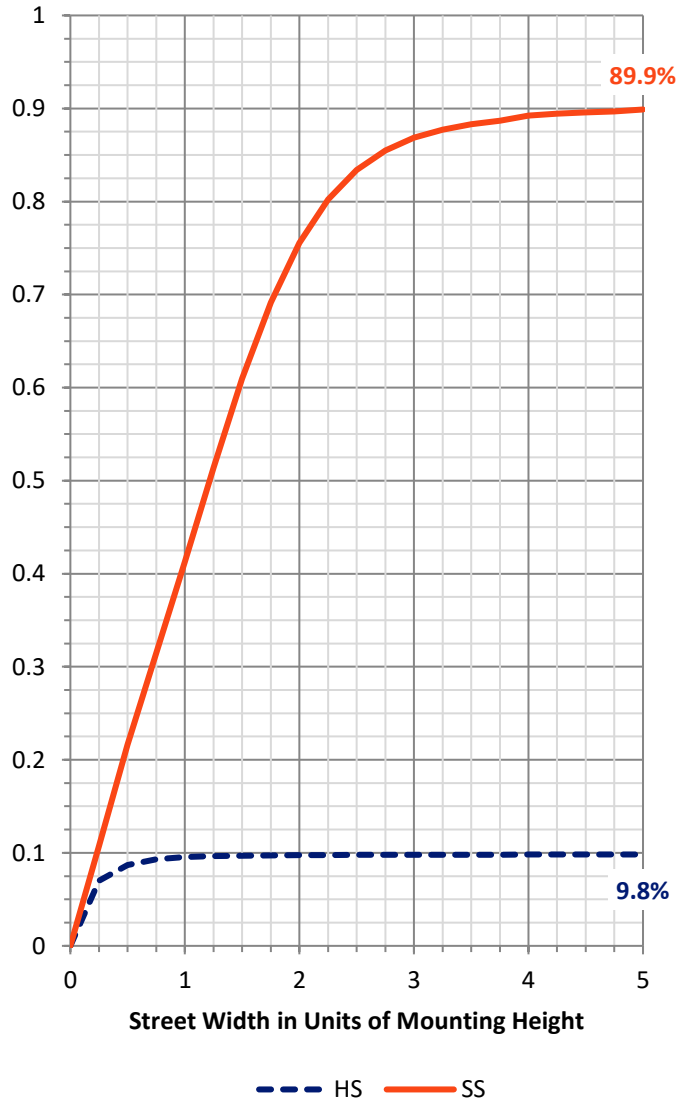
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	932.5	0.0	932.5
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	8478.5	0.0	8478.5
	% Fixture	90.1	0.0	90.1
Total	Lumens	9411.0	0.0	9411.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	0.9
10°-20°	270.1	2.9
20°-30°	432.0	4.6
30°-40°	621.7	6.6
40°-50°	1090.7	11.6
50°-60°	2298.1	24.4
60°-70°	3178.0	33.8
70°-80°	1330.5	14.1
80°-90°	100.6	1.1
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°-90°	9411.0	100.0
0°-180°	9411.0	100.0

Coefficient of Utilization



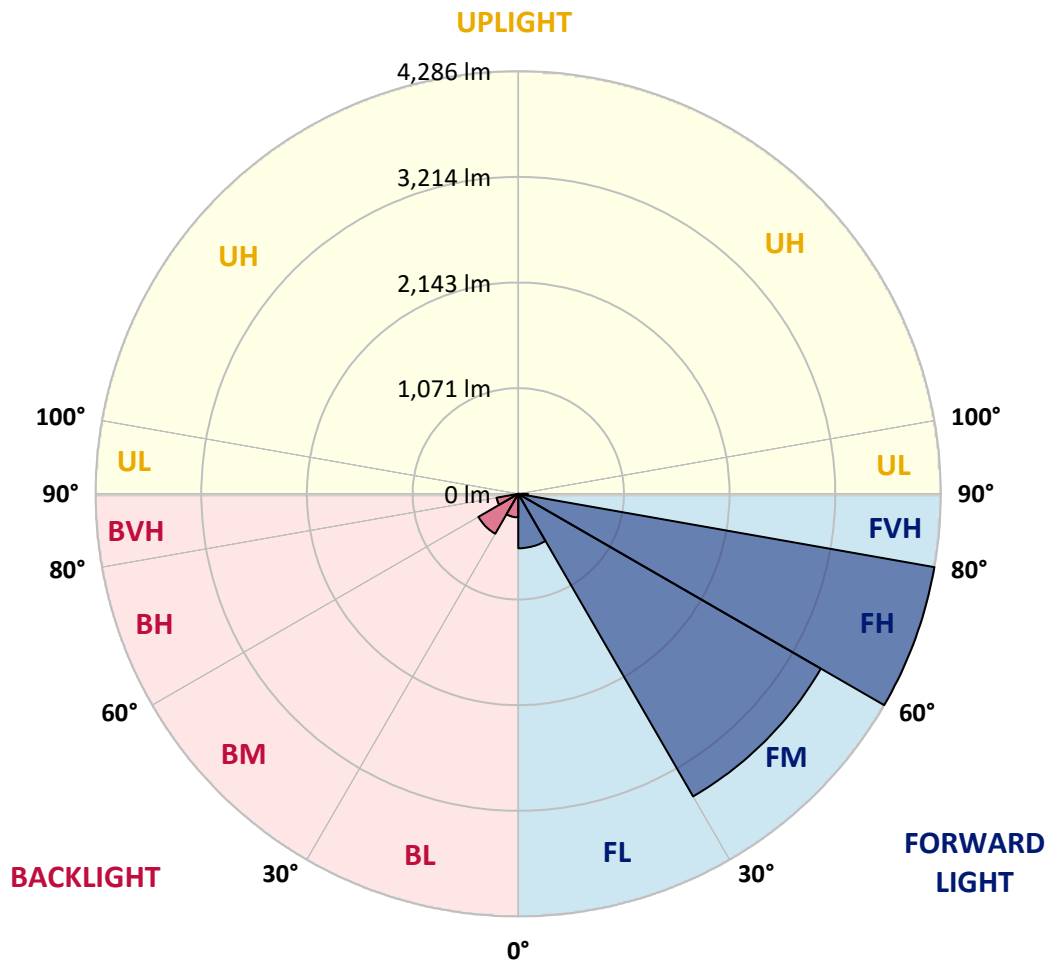
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	552.4	5.9			
FM (30°-60°)	3543.4	37.7			
FH (60°-80°)	4285.6	45.5			G2/5000
FVH (80°-90°)	97.2	1.0			G1/100
BL (0°-30°)	239.0	2.5	B1/500		
BM (30°-60°)	467.2	5.0	B1/1000		
BH (60°-80°)	222.9	2.4	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0
2.5°	990.9	973.5	970.0	966.5	956.1	942.2	945.7	935.2	917.8	907.4	897.0
5°	1112.5	1095.2	1088.2	1067.3	1046.5	1015.2	1015.2	987.4	956.1	928.3	900.5
7.5°	1237.7	1223.8	1209.9	1178.6	1147.3	1105.6	1102.1	1060.4	1011.7	970.0	924.8
10°	1342.0	1331.6	1314.2	1275.9	1234.2	1189.0	1178.6	1140.3	1077.8	1022.1	963.0
12.5°	1425.4	1415.0	1390.7	1352.4	1300.3	1255.1	1251.6	1202.9	1140.3	1081.2	1008.2
15°	1488.0	1470.6	1442.8	1401.1	1348.9	1307.2	1300.3	1258.6	1199.5	1133.4	1046.5
17.5°	1498.4	1488.0	1463.7	1418.5	1373.3	1338.5	1335.0	1303.8	1251.6	1182.1	1091.7
20°	1470.6	1467.2	1446.3	1411.5	1376.8	1359.4	1355.9	1335.0	1293.3	1230.7	1140.3
22.5°	1428.9	1425.4	1411.5	1394.1	1380.2	1376.8	1376.8	1369.8	1345.5	1286.4	1202.9
25°	1401.1	1397.6	1390.7	1380.2	1380.2	1401.1	1404.6	1411.5	1390.7	1345.5	1255.1
27.5°	1404.6	1397.6	1390.7	1380.2	1394.1	1432.4	1435.9	1453.2	1435.9	1394.1	1314.2
30°	1453.2	1442.8	1422.0	1397.6	1415.0	1467.2	1470.6	1491.5	1477.6	1456.7	1380.2
32.5°	1529.7	1522.8	1481.1	1439.3	1449.8	1501.9	1508.9	1547.1	1564.5	1533.2	1439.3
35°	1641.0	1616.7	1564.5	1522.8	1515.8	1554.1	1564.5	1627.1	1672.3	1595.8	1474.1
37.5°	1731.4	1710.5	1627.1	1561.0	1599.3	1686.2	1689.7	1766.1	1727.9	1602.7	1529.7
40°	2037.3	2033.9	1887.8	1679.2	1637.5	1734.9	1748.8	1762.7	1745.3	1682.7	1651.4
42.5°	2531.0	2489.3	2325.9	2006.0	1721.0	1731.4	1738.3	1811.3	1901.7	1873.9	1884.4
45°	3066.4	3031.7	2847.4	2444.1	2006.0	1919.1	1926.1	2044.3	2218.1	2252.9	2308.5
47.5°	3560.1	3504.5	3400.2	2993.4	2492.8	2239.0	2252.9	2395.4	2684.0	2760.5	2847.4
50°	3977.3	3939.1	3841.7	3574.0	3090.8	2743.1	2757.0	2875.2	3250.7	3372.4	3483.6
52.5°	4582.2	4530.1	4342.4	4217.2	3852.1	3400.2	3368.9	3494.1	3925.2	4005.1	4154.6
55°	5138.5	5030.7	4919.5	4867.3	4714.4	4185.9	4175.5	4199.8	4557.9	4599.6	4867.3
57.5°	5374.9	5354.1	5447.9	5621.8	5656.5	5110.7	5065.5	4971.6	5253.2	5249.8	5562.7
60°	5524.4	5524.4	5774.7	6205.9	6484.0	6098.1	6035.5	5743.5	5844.3	5847.8	6136.3
62.5°	5430.6	5454.9	5844.3	6494.4	7054.2	6936.0	6894.2	6404.0	6397.1	6317.1	6417.9
65°	4850.0	4891.7	5517.5	6334.5	7262.8	7540.9	7523.5	6967.2	6765.6	6473.6	6247.6
67°	3956.4	4032.9	4790.8	5757.4	7026.3	7749.5	7753.0	7210.6	6769.1	6212.8	5646.1
67.5°	3740.9	3796.5	4453.6	5548.8	6897.7	7753.0	7753.0	7241.9	6748.2	6132.8	5437.5
70°	2385.0	2398.9	3115.1	4293.7	5893.0	7377.5	7405.3	7005.5	6146.8	4964.7	3817.4
72.5°	1178.6	1147.3	1644.5	2764.0	4422.3	6313.6	6386.6	5983.3	4863.9	3243.7	2016.5
75°	462.4	493.7	716.2	1470.6	2770.9	4759.6	4815.2	4352.8	3129.0	1672.3	796.2
77.5°	205.1	205.1	305.9	660.6	1456.7	2920.4	2948.2	2656.2	1651.4	688.4	243.4
80°	111.3	118.2	159.9	288.6	733.6	1342.0	1463.7	1317.7	747.5	302.5	83.4
82.5°	55.6	59.1	97.3	163.4	368.5	507.6	535.4	559.7	344.2	187.7	34.8
85°	20.9	24.3	52.2	93.9	166.9	170.4	170.4	219.0	187.7	142.5	17.4
87.5°	3.5	7.0	24.3	38.2	66.1	59.1	52.2	69.5	104.3	90.4	10.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0	890.0
2.5°	890.0	883.1	869.2	858.7	851.8	844.8	837.9	837.9	834.4	834.4	837.9
5°	890.0	876.1	848.3	830.9	817.0	806.6	799.6	799.6	796.2	799.6	803.1
7.5°	907.4	886.6	848.3	817.0	799.6	782.3	775.3	771.8	771.8	775.3	771.8
10°	935.2	907.4	858.7	817.0	792.7	768.3	730.1	695.3	664.0	650.1	646.7
12.5°	970.0	935.2	876.1	827.4	789.2	705.8	601.5	535.4	493.7	472.8	465.9
15°	1008.2	966.5	897.0	841.4	737.1	580.6	445.0	372.0	347.7	351.1	354.6
17.5°	1050.0	1004.8	928.3	834.4	632.8	431.1	326.8	309.4	319.9	330.3	330.3
20°	1091.7	1043.0	959.6	782.3	497.2	319.9	292.0	295.5	305.9	316.4	316.4
22.5°	1147.3	1095.2	990.9	691.9	368.5	278.1	278.1	285.1	292.0	302.5	302.5
25°	1206.4	1154.3	1011.7	580.6	274.7	260.8	264.2	271.2	278.1	288.6	288.6
27.5°	1269.0	1216.8	1008.2	448.5	239.9	239.9	243.4	253.8	260.8	271.2	271.2
30°	1338.5	1293.3	970.0	326.8	222.5	219.0	219.0	229.5	239.9	246.8	250.3
32.5°	1397.6	1359.4	903.9	246.8	208.6	201.6	198.2	201.6	212.1	219.0	222.5
35°	1446.3	1432.4	806.6	212.1	194.7	184.3	177.3	173.8	177.3	177.3	180.8
37.5°	1536.7	1540.2	691.9	198.2	184.3	170.4	156.5	146.0	139.1	135.6	132.1
40°	1707.0	1703.6	570.2	187.7	173.8	156.5	135.6	121.7	104.3	97.3	97.3
42.5°	1946.9	1894.8	434.6	177.3	163.4	142.5	114.7	93.9	76.5	73.0	73.0
45°	2378.0	2162.5	326.8	170.4	153.0	125.2	93.9	69.5	59.1	55.6	55.6
47.5°	2854.3	2471.9	260.8	159.9	142.5	111.3	73.0	55.6	45.2	45.2	45.2
50°	3379.3	2767.4	219.0	149.5	125.2	93.9	59.1	45.2	41.7	38.2	41.7
52.5°	3953.0	3000.4	191.2	135.6	107.8	76.5	48.7	41.7	34.8	34.8	34.8
55°	4467.5	3156.8	159.9	118.2	90.4	62.6	45.2	34.8	31.3	27.8	24.3
57.5°	4933.4	3240.3	128.6	100.8	69.5	52.2	38.2	27.8	24.3	17.4	17.4
60°	5173.3	3163.8	100.8	80.0	55.6	41.7	31.3	24.3	17.4	10.4	10.4
62.5°	5211.5	2965.6	80.0	62.6	48.7	34.8	24.3	17.4	10.4	7.0	7.0
65°	4877.8	2617.9	66.1	52.2	38.2	27.8	20.9	13.9	7.0	3.5	3.5
67°	4279.8	2252.9	59.1	45.2	34.8	24.3	17.4	10.4	7.0	3.5	0.0
67.5°	4161.6	2186.8	55.6	45.2	34.8	24.3	17.4	10.4	7.0	3.5	0.0
70°	2732.7	1512.4	52.2	41.7	31.3	20.9	13.9	10.4	3.5	0.0	0.0
72.5°	1491.5	761.4	48.7	38.2	27.8	20.9	13.9	7.0	3.5	0.0	0.0
75°	545.8	288.6	41.7	34.8	24.3	20.9	13.9	7.0	3.5	0.0	0.0
77.5°	184.3	100.8	38.2	34.8	27.8	20.9	13.9	7.0	3.5	0.0	0.0
80°	62.6	45.2	31.3	27.8	20.9	17.4	13.9	7.0	3.5	0.0	0.0
82.5°	24.3	13.9	10.4	10.4	10.4	13.9	13.9	10.4	3.5	0.0	0.0
85°	10.4	7.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0	0.0
87.5°	10.4	7.0	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)