

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: P397551

Luminaire Tested: **ARCH-S-PA1-100-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397551
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7559 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
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: 28.75 FT

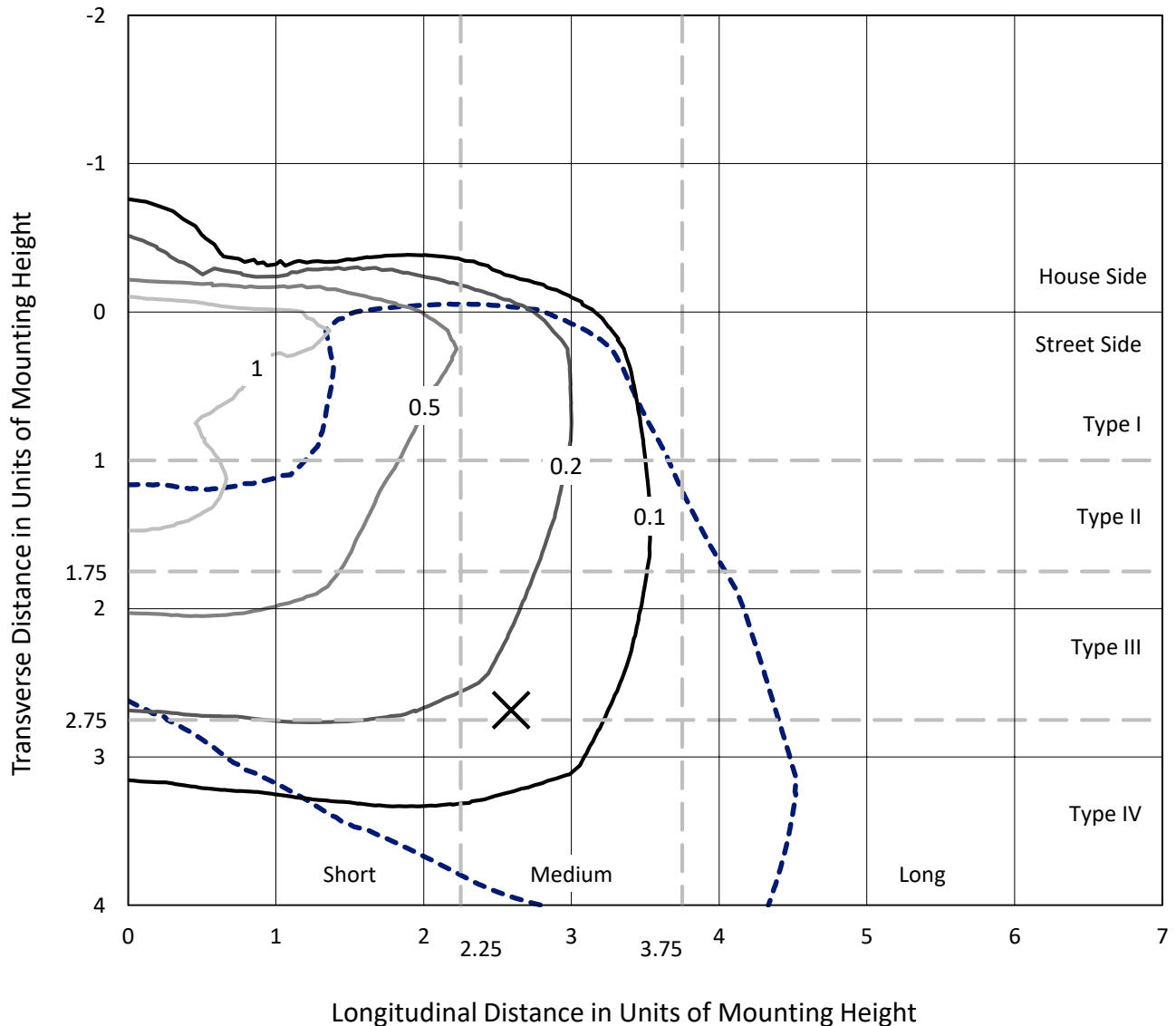


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

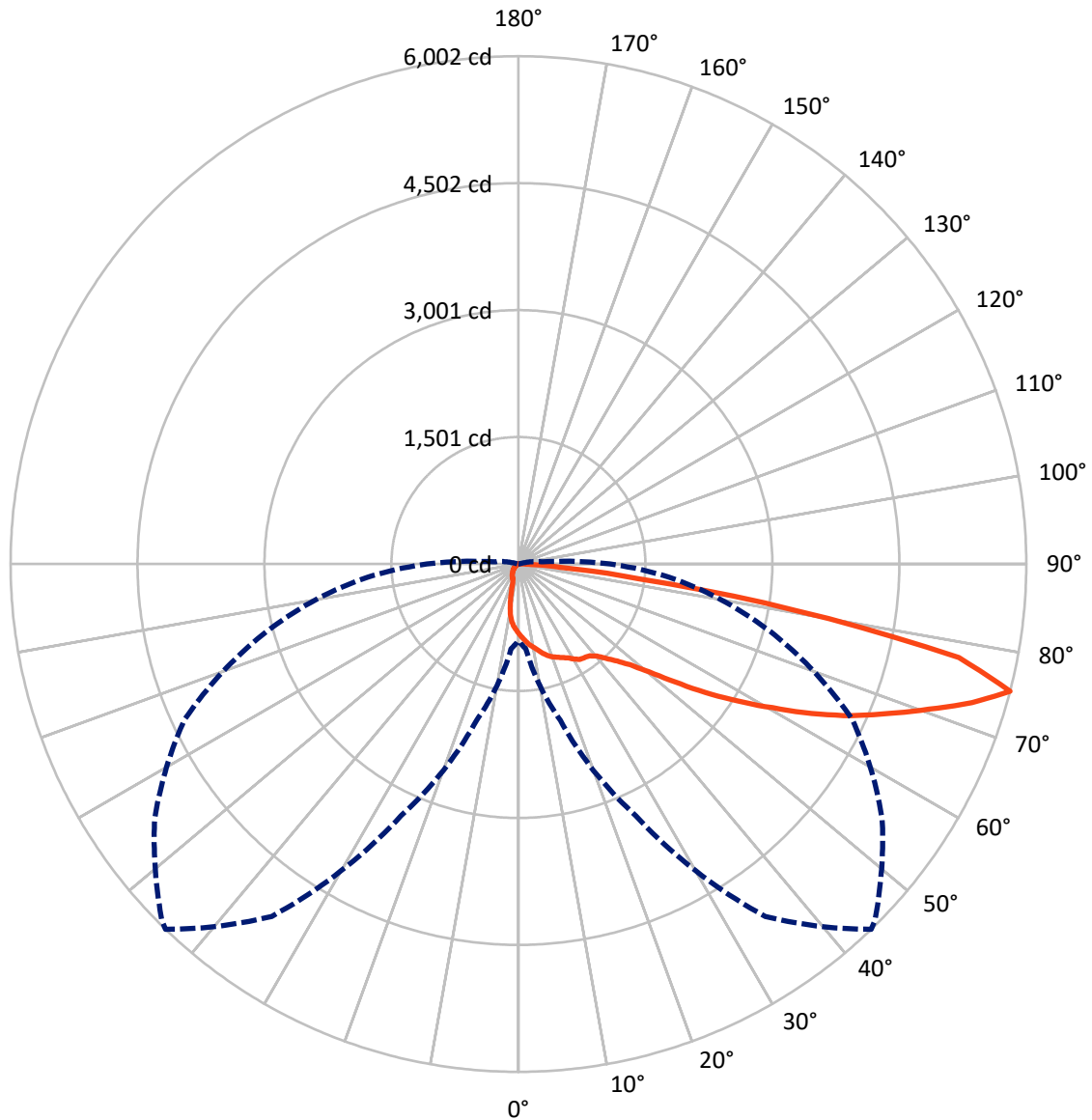


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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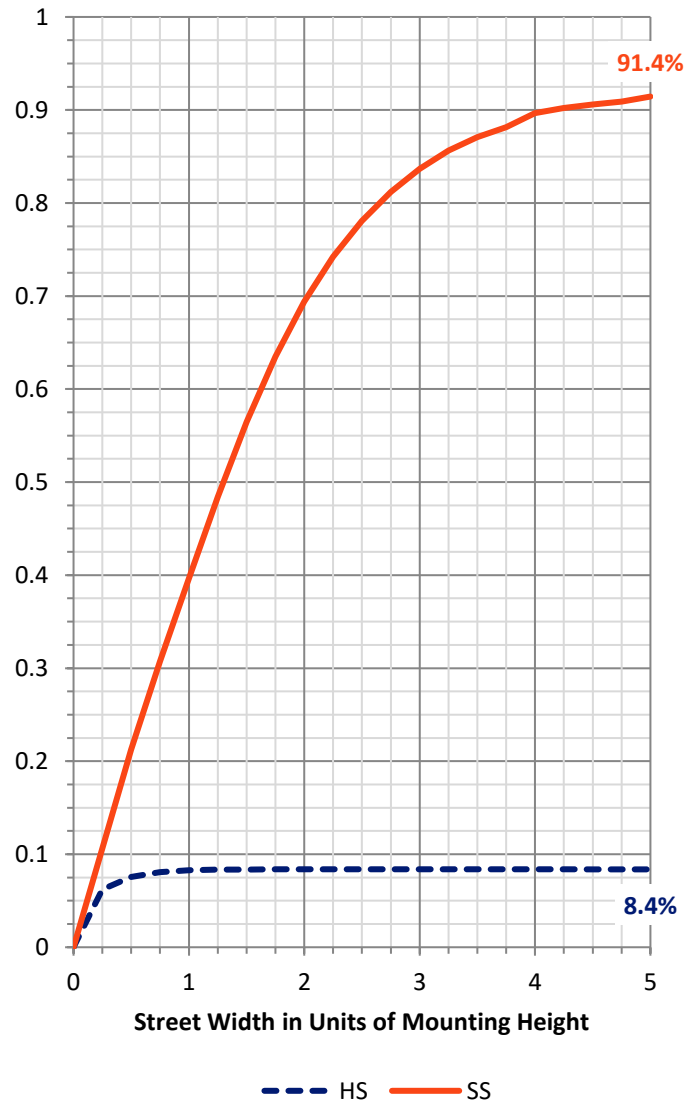
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	637.5	0.0	637.5
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6921.5	0.0	6921.5
	% Fixture	91.6	0.0	91.6
Total	Lumens	7559.0	0.0	7559.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.6	1.0
10°-20°	217.4	2.9
20°-30°	358.8	4.7
30°-40°	520.8	6.9
40°-50°	846.6	11.2
50°-60°	1492.4	19.7
60°-70°	2144.9	28.4
70°-80°	1717.6	22.7
80°-90°	183.0	2.4
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°	7559.0	100.0
0°-180°	7559.0	100.0



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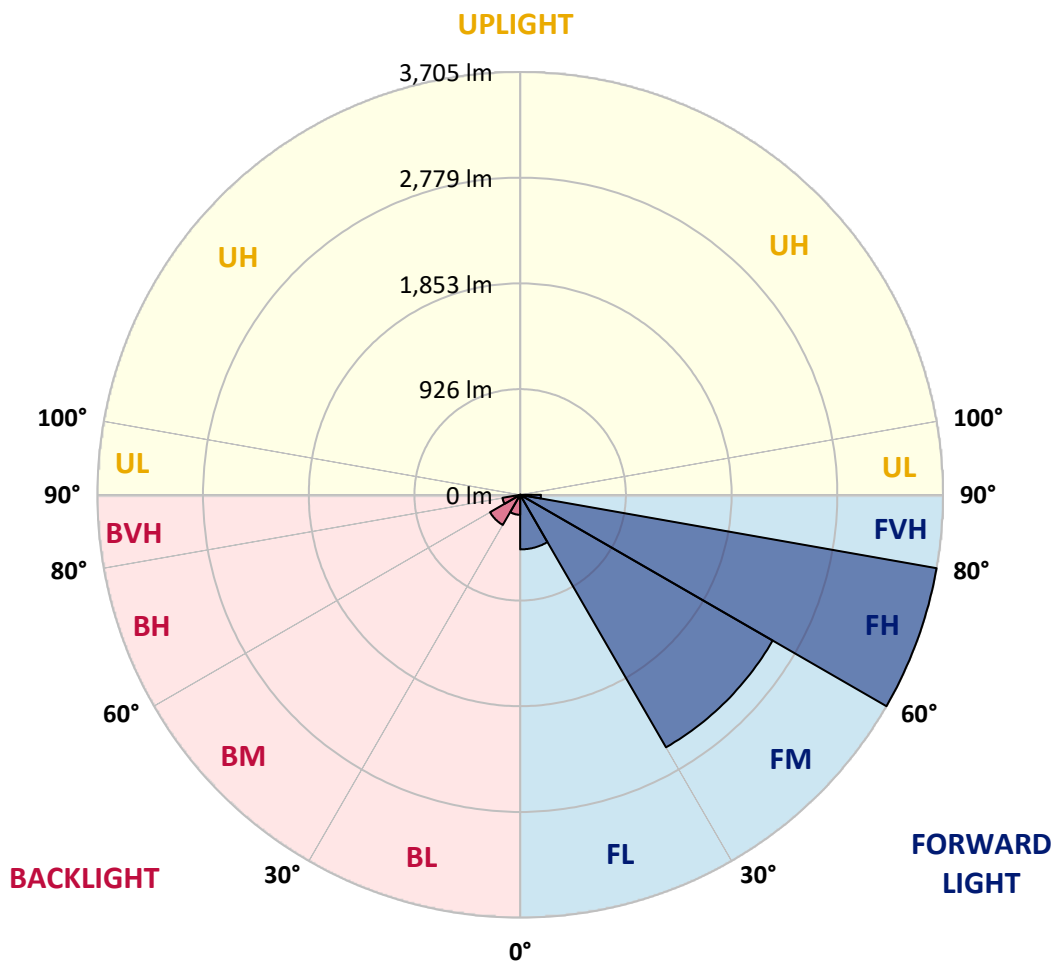
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	478.7	6.3			
FM	(30°-60°)	2555.0	33.8			
FH	(60°-80°)	3705.3	49.0			G2/5000
FVH	(80°-90°)	182.5	2.4			G2/225
BL	(0°-30°)	175.1	2.3	B1/500		
BM	(30°-60°)	304.7	4.0	B1/1000		
BH	(60°-80°)	157.2	2.1	B1/500		G1/500
BVH	(80°-90°)	0.5	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8
2.5°	896.7	895.3	891.1	884.1	877.2	870.2	868.8	857.6	845.1	835.3	827.0
5°	976.2	974.8	967.8	952.5	937.1	919.0	917.6	891.1	867.4	840.9	818.6
7.5°	1058.4	1055.7	1043.1	1019.4	992.9	965.0	962.2	923.2	888.3	853.4	821.4
10°	1122.6	1119.8	1101.7	1073.8	1037.5	1002.7	998.5	958.0	923.2	878.5	835.3
12.5°	1185.3	1179.8	1156.1	1125.4	1080.8	1047.3	1043.1	1001.3	959.4	913.4	860.4
15°	1243.9	1236.9	1214.6	1175.6	1128.2	1096.1	1093.3	1048.7	1005.5	952.5	893.9
17.5°	1284.4	1281.6	1255.1	1211.8	1165.8	1139.3	1136.5	1090.5	1047.3	991.5	928.8
20°	1305.3	1305.3	1280.2	1232.8	1190.9	1172.8	1168.6	1125.4	1083.5	1030.6	965.0
22.5°	1309.5	1313.6	1294.1	1242.5	1211.8	1196.5	1193.7	1156.1	1115.6	1066.8	1005.5
25°	1317.8	1317.8	1308.1	1252.3	1230.0	1225.8	1224.4	1190.9	1154.7	1105.9	1045.9
27.5°	1327.6	1327.6	1320.6	1266.2	1257.9	1256.5	1255.1	1239.7	1210.4	1153.3	1093.3
30°	1352.7	1354.1	1348.5	1294.1	1288.5	1303.9	1306.7	1298.3	1262.0	1190.9	1142.1
32.5°	1415.4	1402.9	1387.6	1313.6	1323.4	1342.9	1344.3	1327.6	1288.5	1231.4	1200.7
35°	1573.0	1499.1	1429.4	1330.4	1334.6	1354.1	1356.9	1355.5	1331.8	1283.0	1267.6
37.5°	1719.4	1614.9	1515.8	1369.4	1355.5	1376.4	1382.0	1405.7	1387.6	1354.1	1358.3
40°	1804.5	1764.1	1694.3	1476.8	1397.3	1429.4	1435.0	1471.2	1464.2	1450.3	1476.8
42.5°	2066.7	2069.5	1994.2	1637.2	1474.0	1525.6	1532.6	1561.9	1571.6	1578.6	1642.7
45°	2370.7	2380.5	2362.3	1925.8	1619.0	1635.8	1645.5	1684.6	1720.8	1765.5	1882.6
47.5°	2736.1	2727.7	2660.7	2278.7	1871.4	1778.0	1785.0	1860.3	1923.0	2020.7	2188.0
50°	3059.6	3080.5	2953.6	2607.8	2227.1	2002.5	1995.6	2069.5	2182.4	2319.1	2529.7
52.5°	3385.9	3355.2	3183.7	2934.1	2648.2	2307.9	2287.0	2327.5	2486.4	2648.2	2864.3
55°	3472.4	3475.2	3416.6	3291.1	2999.6	2678.9	2644.0	2641.2	2839.2	2949.4	3215.8
57.5°	3642.5	3649.5	3663.4	3688.5	3550.5	3049.8	3013.6	2974.5	3167.0	3231.1	3568.6
60°	3815.4	3823.8	3908.8	4044.1	3952.1	3450.0	3411.0	3319.0	3426.3	3512.8	3939.5
62.5°	3793.1	3851.7	4098.5	4367.6	4356.5	3889.3	3840.5	3618.8	3687.1	3762.4	4279.8
65°	3424.9	3487.7	4042.7	4456.9	4762.3	4323.0	4243.5	3928.4	3932.6	4023.2	4607.5
67.5°	3095.8	3164.2	3694.1	4419.2	5030.0	4712.1	4629.8	4239.3	4173.8	4324.4	4783.2
70°	2906.2	2974.5	3416.6	4302.1	5105.3	5143.0	5071.9	4595.0	4461.1	4599.1	4586.6
72.5°	2274.5	2381.8	3062.4	4079.0	5186.2	5604.6	5548.8	5045.4	4705.1	4311.9	3491.9
75°	906.4	1005.5	1911.9	3282.7	5084.4	6002.0	5958.8	5247.6	4355.1	3079.1	1787.8
77.5°	273.3	292.8	531.3	1623.2	3727.6	5321.5	5307.6	4412.3	3081.9	1429.4	488.1
80°	90.6	100.4	163.2	447.6	1701.3	3324.5	3387.3	2811.4	1400.1	327.7	99.0
82.5°	37.7	41.8	82.3	179.9	602.4	1432.2	1411.3	1259.3	488.1	203.6	36.3
85°	9.8	12.6	37.7	103.2	220.3	493.7	518.8	422.5	276.1	168.7	11.2
87.5°	0.0	0.0	18.1	41.8	99.0	149.2	156.2	128.3	156.2	126.9	5.6
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°	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8	822.8
2.5°	820.0	813.0	800.5	792.1	780.9	778.1	772.6	765.6	764.2	757.2	758.6
5°	806.0	794.9	772.6	757.2	739.1	733.5	723.8	716.8	711.2	701.4	702.8
7.5°	803.2	786.5	755.8	726.5	697.3	676.3	647.1	623.4	603.8	582.9	587.1
10°	813.0	792.1	748.9	708.4	655.4	588.5	511.8	461.6	436.5	411.4	414.2
12.5°	832.5	807.4	751.6	690.3	582.9	468.6	362.6	294.2	276.1	265.0	266.4
15°	861.8	831.1	760.0	655.4	485.3	338.9	241.3	212.0	218.9	223.1	223.1
17.5°	892.5	857.6	767.0	592.7	375.1	237.1	196.6	193.8	203.6	213.4	213.4
20°	930.1	885.5	768.4	513.2	270.5	192.4	185.5	185.5	192.4	203.6	203.6
22.5°	966.4	916.2	755.8	422.5	206.4	178.5	178.5	178.5	182.7	193.8	195.2
25°	1009.6	953.9	729.3	326.3	177.1	170.1	170.1	171.5	174.3	184.1	185.5
27.5°	1055.7	992.9	684.7	238.5	161.8	160.4	161.8	163.2	164.6	174.3	177.1
30°	1108.6	1036.1	627.5	178.5	147.8	147.8	152.0	154.8	154.8	163.2	165.9
32.5°	1170.0	1093.3	559.2	147.8	133.9	132.5	139.5	143.6	143.6	150.6	153.4
35°	1246.7	1151.9	476.9	131.1	122.7	119.9	122.7	129.7	132.5	138.1	139.5
37.5°	1348.5	1221.6	389.1	121.3	114.4	108.8	108.8	110.2	115.7	121.3	122.7
40°	1478.2	1298.3	302.6	114.4	106.0	100.4	96.2	94.8	93.4	97.6	100.4
42.5°	1641.4	1384.8	225.9	107.4	99.0	90.6	85.1	79.5	72.5	71.1	72.5
45°	1850.5	1490.7	167.3	101.8	94.8	82.3	72.5	62.8	50.2	46.0	47.4
47.5°	2097.4	1600.9	131.1	96.2	92.0	72.5	60.0	43.2	30.7	27.9	29.3
50°	2359.5	1706.9	111.6	89.2	86.5	62.8	43.2	26.5	18.1	18.1	19.5
52.5°	2582.7	1766.9	101.8	83.7	78.1	51.6	27.9	15.3	11.2	11.2	12.6
55°	2798.8	1798.9	94.8	78.1	66.9	36.3	15.3	9.8	7.0	7.0	7.0
57.5°	3021.9	1812.9	86.5	71.1	53.0	22.3	8.4	5.6	4.2	4.2	4.2
60°	3220.0	1786.4	73.9	58.6	34.9	11.2	4.2	4.2	2.8	1.4	1.4
62.5°	3385.9	1736.2	51.6	41.8	20.9	5.6	2.8	1.4	0.0	0.0	0.0
65°	3487.7	1655.3	33.5	27.9	12.6	4.2	1.4	0.0	0.0	0.0	0.0
67.5°	3458.4	1503.3	20.9	18.1	5.6	2.8	1.4	0.0	0.0	0.0	0.0
70°	3120.9	1232.8	15.3	11.2	4.2	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	2249.4	833.9	11.2	7.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1082.1	297.0	7.0	5.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	265.0	65.5	4.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.6	12.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.5	5.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.4	0.0	0.0	0.0	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)