

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: P397542

Luminaire Tested: **ARCH-S-PA1-100-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397542
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-PA1-100-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 6942 lumens
Efficiency: N/A
Efficacy: 72.3 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 (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: 28.75 FT

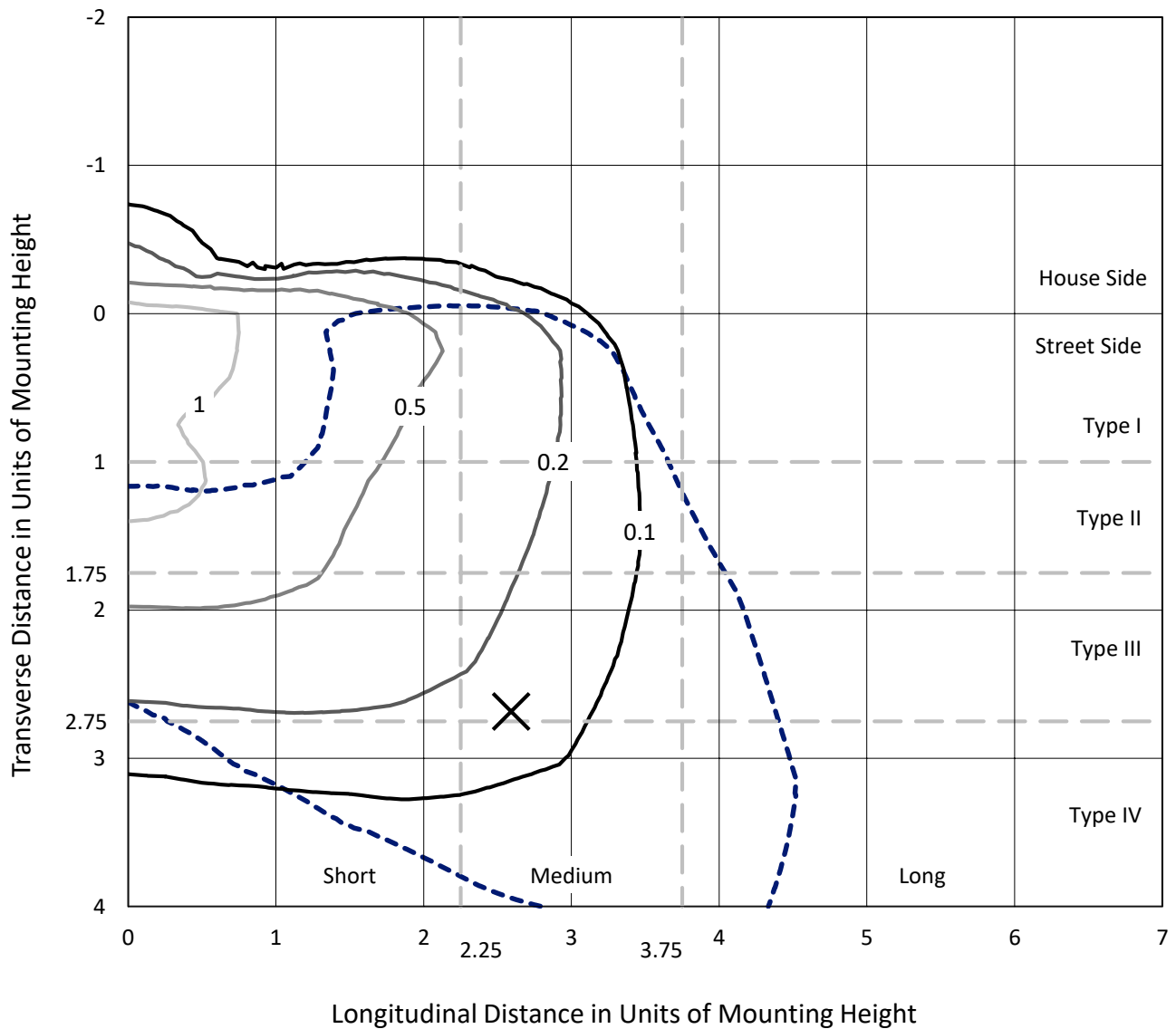


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

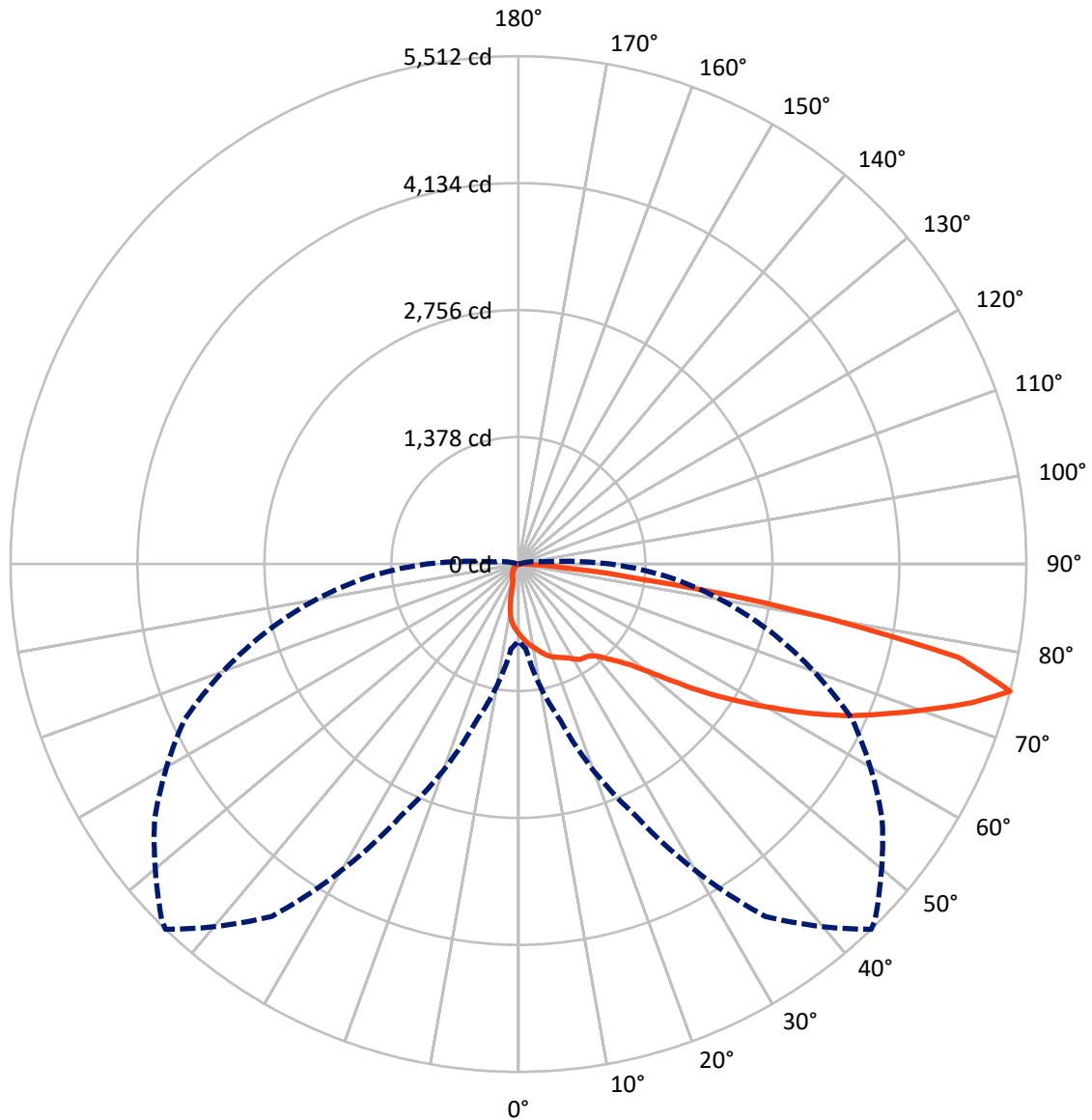


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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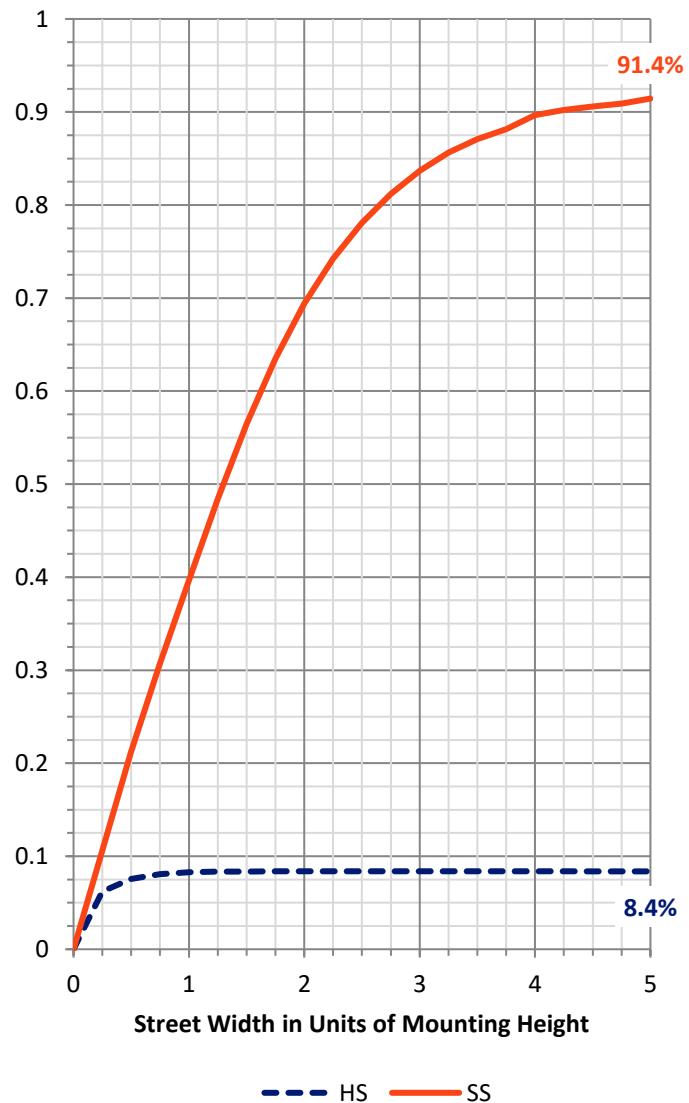
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	585.4	0.0	585.4
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6356.6	0.0	6356.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	6942.0	0.0	6942.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	1.0
10°-20°	199.7	2.9
20°-30°	329.5	4.7
30°-40°	478.3	6.9
40°-50°	777.5	11.2
50°-60°	1370.6	19.7
60°-70°	1969.8	28.4
70°-80°	1577.4	22.7
80°-90°	168.1	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°	6942.0	100.0
0°-180°	6942.0	100.0



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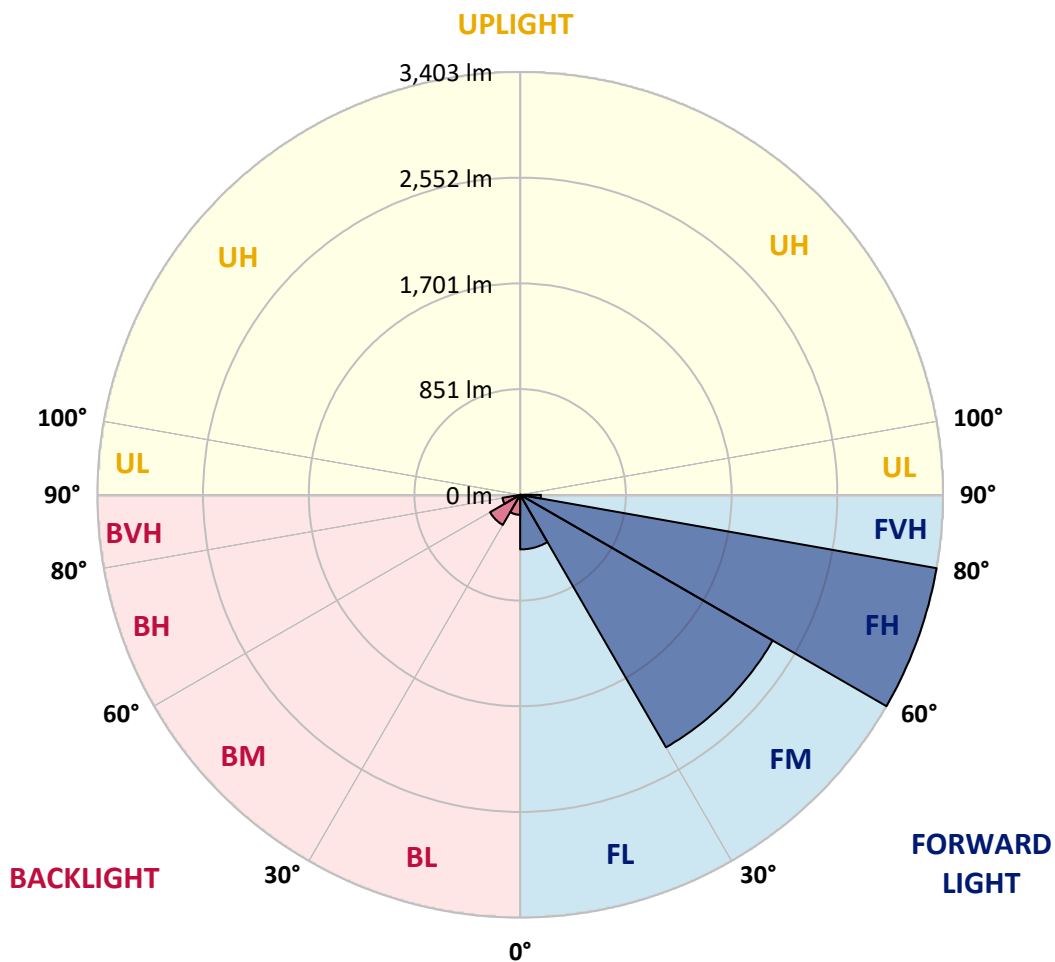
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	439.6	6.3			
FM (30°-60°)	2346.5	33.8			
FH (60°-80°)	3402.8	49.0			G2/5000
FVH (80°-90°)	167.6	2.4			G2/225
BL (0°-30°)	160.8	2.3	B1/500		
BM (30°-60°)	279.8	4.0	B1/1000		
BH (60°-80°)	144.3	2.1	B1/500		G1/500
BVH (80°-90°)	0.4	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6
2.5°	823.5	822.2	818.4	812.0	805.6	799.2	797.9	787.6	776.1	767.1	759.5
5°	896.5	895.2	888.8	874.7	860.6	844.0	842.7	818.4	796.6	772.3	751.8
7.5°	972.0	969.5	958.0	936.2	911.9	886.2	883.7	847.8	815.8	783.8	754.3
10°	1031.0	1028.4	1011.7	986.1	952.8	920.8	917.0	879.8	847.8	806.8	767.1
12.5°	1088.6	1083.5	1061.7	1033.5	992.5	961.8	958.0	919.5	881.1	838.9	790.2
15°	1142.4	1136.0	1115.5	1079.6	1036.1	1006.6	1004.1	963.1	923.4	874.7	820.9
17.5°	1179.5	1177.0	1152.6	1112.9	1070.7	1046.3	1043.8	1001.5	961.8	910.6	852.9
20°	1198.7	1198.7	1175.7	1132.1	1093.7	1077.1	1073.2	1033.5	995.1	946.4	886.2
22.5°	1202.6	1206.4	1188.5	1141.1	1112.9	1098.8	1096.3	1061.7	1024.6	979.7	923.4
25°	1210.3	1210.3	1201.3	1150.1	1129.6	1125.7	1124.5	1093.7	1060.4	1015.6	960.5
27.5°	1219.2	1219.2	1212.8	1162.9	1155.2	1153.9	1152.6	1138.5	1111.6	1059.1	1004.1
30°	1242.3	1243.6	1238.4	1188.5	1183.4	1197.5	1200.0	1192.3	1159.0	1093.7	1048.9
32.5°	1299.9	1288.4	1274.3	1206.4	1215.4	1233.3	1234.6	1219.2	1183.4	1130.9	1102.7
35°	1444.6	1376.7	1312.7	1221.8	1225.6	1243.6	1246.1	1244.8	1223.1	1178.2	1164.2
37.5°	1579.1	1483.0	1392.1	1257.6	1244.8	1264.0	1269.2	1290.9	1274.3	1243.6	1247.4
40°	1657.2	1620.1	1556.0	1356.3	1283.3	1312.7	1317.8	1351.1	1344.7	1331.9	1356.3
42.5°	1898.0	1900.6	1831.4	1503.5	1353.7	1401.1	1407.5	1434.4	1443.3	1449.7	1508.7
45°	2177.2	2186.1	2169.5	1768.6	1486.9	1502.3	1511.2	1547.1	1580.4	1621.4	1728.9
47.5°	2512.7	2505.0	2443.6	2092.7	1718.7	1632.9	1639.3	1708.4	1766.1	1855.7	2009.4
50°	2809.8	2829.1	2712.5	2394.9	2045.3	1839.1	1832.7	1900.6	2004.3	2129.8	2323.2
52.5°	3109.5	3081.4	2923.8	2694.6	2432.0	2119.6	2100.3	2137.5	2283.5	2432.0	2630.5
55°	3188.9	3191.5	3137.7	3022.4	2754.8	2460.2	2428.2	2425.6	2607.5	2708.7	2953.3
57.5°	3345.2	3351.6	3364.4	3387.4	3260.7	2800.9	2767.6	2731.7	2908.5	2967.4	3277.3
60°	3504.0	3511.7	3589.8	3714.0	3629.5	3168.4	3132.6	3048.1	3146.7	3226.1	3618.0
62.5°	3483.5	3537.3	3764.0	4011.1	4000.9	3571.9	3527.0	3323.4	3386.2	3455.3	3930.5
65°	3145.4	3203.0	3712.7	4093.1	4373.6	3970.2	3897.2	3607.7	3611.6	3694.8	4231.4
67.5°	2843.1	2905.9	3392.6	4058.5	4619.5	4327.5	4251.9	3893.3	3833.1	3971.4	4392.8
70°	2669.0	2731.7	3137.7	3950.9	4688.6	4723.2	4657.9	4219.9	4096.9	4223.7	4212.2
72.5°	2088.8	2187.4	2812.4	3746.0	4762.9	5147.1	5095.9	4633.6	4321.1	3959.9	3206.9
75°	832.5	923.4	1755.8	3014.8	4669.4	5512.1	5472.4	4819.3	3999.6	2827.8	1641.9
77.5°	251.0	268.9	487.9	1490.7	3423.3	4887.1	4874.3	4052.1	2830.3	1312.7	448.2
80°	83.2	92.2	149.8	411.1	1562.4	3053.2	3110.8	2581.9	1285.8	301.0	90.9
82.5°	34.6	38.4	75.6	165.2	553.3	1315.3	1296.1	1156.5	448.2	187.0	33.3
85°	9.0	11.5	34.6	94.8	202.3	453.4	476.4	388.1	253.6	155.0	10.2
87.5°	0.0	0.0	16.6	38.4	90.9	137.0	143.4	117.8	143.4	116.5	5.1
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°	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6	755.6
2.5°	753.0	746.6	735.1	727.4	717.2	714.6	709.5	703.1	701.8	695.4	696.7
5°	740.2	730.0	709.5	695.4	678.8	673.6	664.7	658.3	653.2	644.2	645.5
7.5°	737.7	722.3	694.1	667.2	640.3	621.1	594.2	572.5	554.5	535.3	539.2
10°	746.6	727.4	687.7	650.6	601.9	540.5	470.0	423.9	400.9	377.8	380.4
12.5°	764.6	741.5	690.3	633.9	535.3	430.3	333.0	270.2	253.6	243.3	244.6
15°	791.5	763.3	698.0	601.9	445.7	311.2	221.6	194.7	201.1	204.9	204.9
17.5°	819.6	787.6	704.4	544.3	344.5	217.7	180.6	178.0	187.0	195.9	195.9
20°	854.2	813.2	705.7	471.3	248.5	176.7	170.3	170.3	176.7	187.0	187.0
22.5°	887.5	841.4	694.1	388.1	189.5	163.9	163.9	163.9	167.8	178.0	179.3
25°	927.2	876.0	669.8	299.7	162.6	156.2	156.2	157.5	160.1	169.1	170.3
27.5°	969.5	911.9	628.8	219.0	148.6	147.3	148.6	149.8	151.1	160.1	162.6
30°	1018.2	951.6	576.3	163.9	135.8	135.8	139.6	142.2	142.2	149.8	152.4
32.5°	1074.5	1004.1	513.6	135.8	122.9	121.7	128.1	131.9	131.9	138.3	140.9
35°	1144.9	1057.9	438.0	120.4	112.7	110.1	112.7	119.1	121.7	126.8	128.1
37.5°	1238.4	1121.9	357.3	111.4	105.0	99.9	99.9	101.2	106.3	111.4	112.7
40°	1357.5	1192.3	277.9	105.0	97.3	92.2	88.4	87.1	85.8	89.6	92.2
42.5°	1507.4	1271.7	207.5	98.6	90.9	83.2	78.1	73.0	66.6	65.3	66.6
45°	1699.5	1369.1	153.7	93.5	87.1	75.6	66.6	57.6	46.1	42.3	43.5
47.5°	1926.2	1470.2	120.4	88.4	84.5	66.6	55.1	39.7	28.2	25.6	26.9
50°	2166.9	1567.6	102.5	82.0	79.4	57.6	39.7	24.3	16.6	16.6	17.9
52.5°	2371.8	1622.6	93.5	76.8	71.7	47.4	25.6	14.1	10.2	10.2	11.5
55°	2570.4	1652.1	87.1	71.7	61.5	33.3	14.1	9.0	6.4	6.4	6.4
57.5°	2775.3	1664.9	79.4	65.3	48.7	20.5	7.7	5.1	3.8	3.8	3.8
60°	2957.1	1640.6	67.9	53.8	32.0	10.2	3.8	3.8	2.6	1.3	1.3
62.5°	3109.5	1594.5	47.4	38.4	19.2	5.1	2.6	1.3	0.0	0.0	0.0
65°	3203.0	1520.2	30.7	25.6	11.5	3.8	1.3	0.0	0.0	0.0	0.0
67.5°	3176.1	1380.6	19.2	16.6	5.1	2.6	1.3	0.0	0.0	0.0	0.0
70°	2866.2	1132.1	14.1	10.2	3.8	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	2065.8	765.9	10.2	6.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	993.8	272.8	6.4	5.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	243.3	60.2	3.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	53.8	11.5	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.9	5.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	1.3	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)