

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: P397848

Luminaire Tested: **ARCH-S-PA1-50-740-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397848
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-PA1-50-740-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA 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: 5542 lumens
Efficiency: N/A
Efficacy: 102.6 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): 54
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

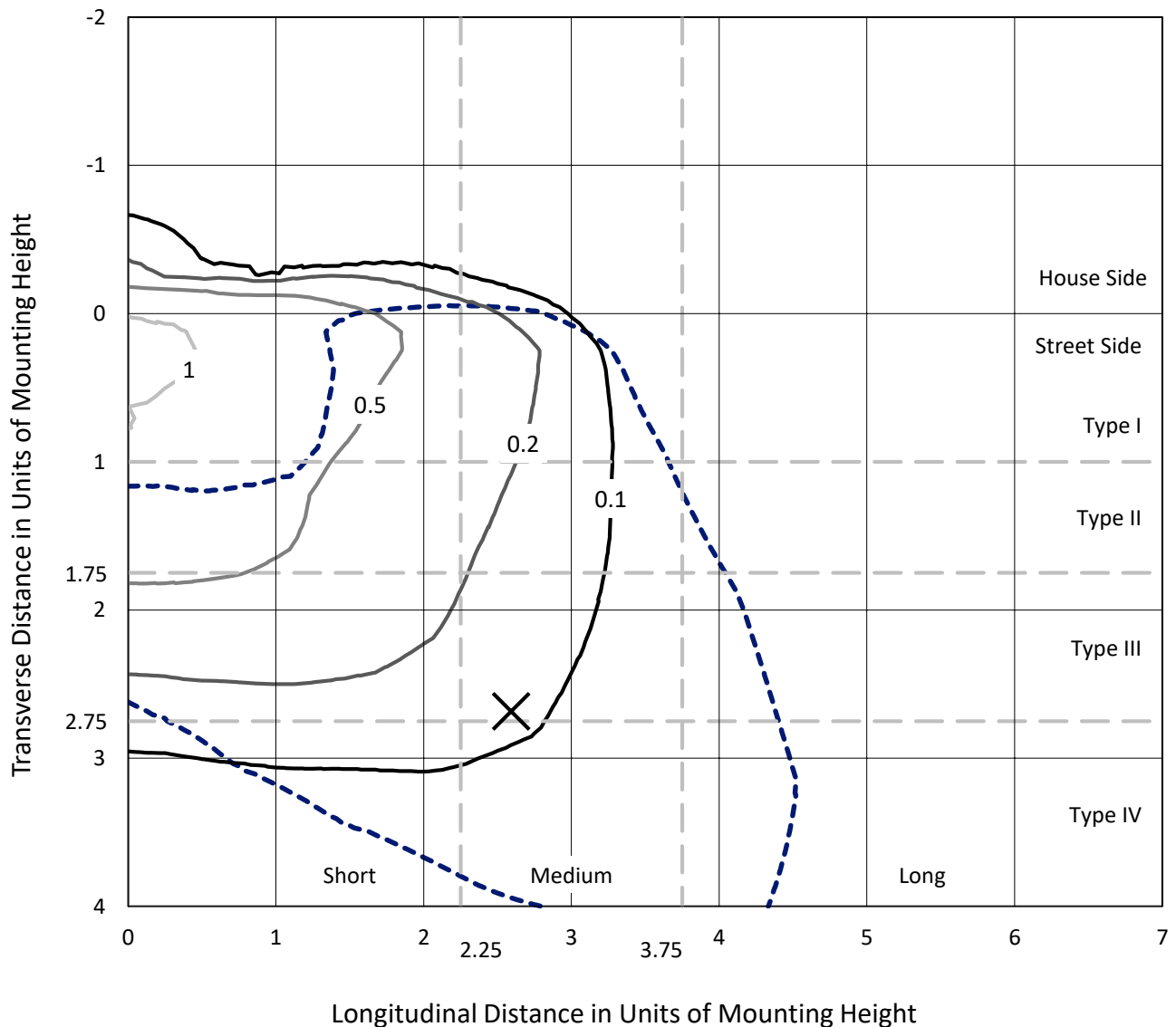


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

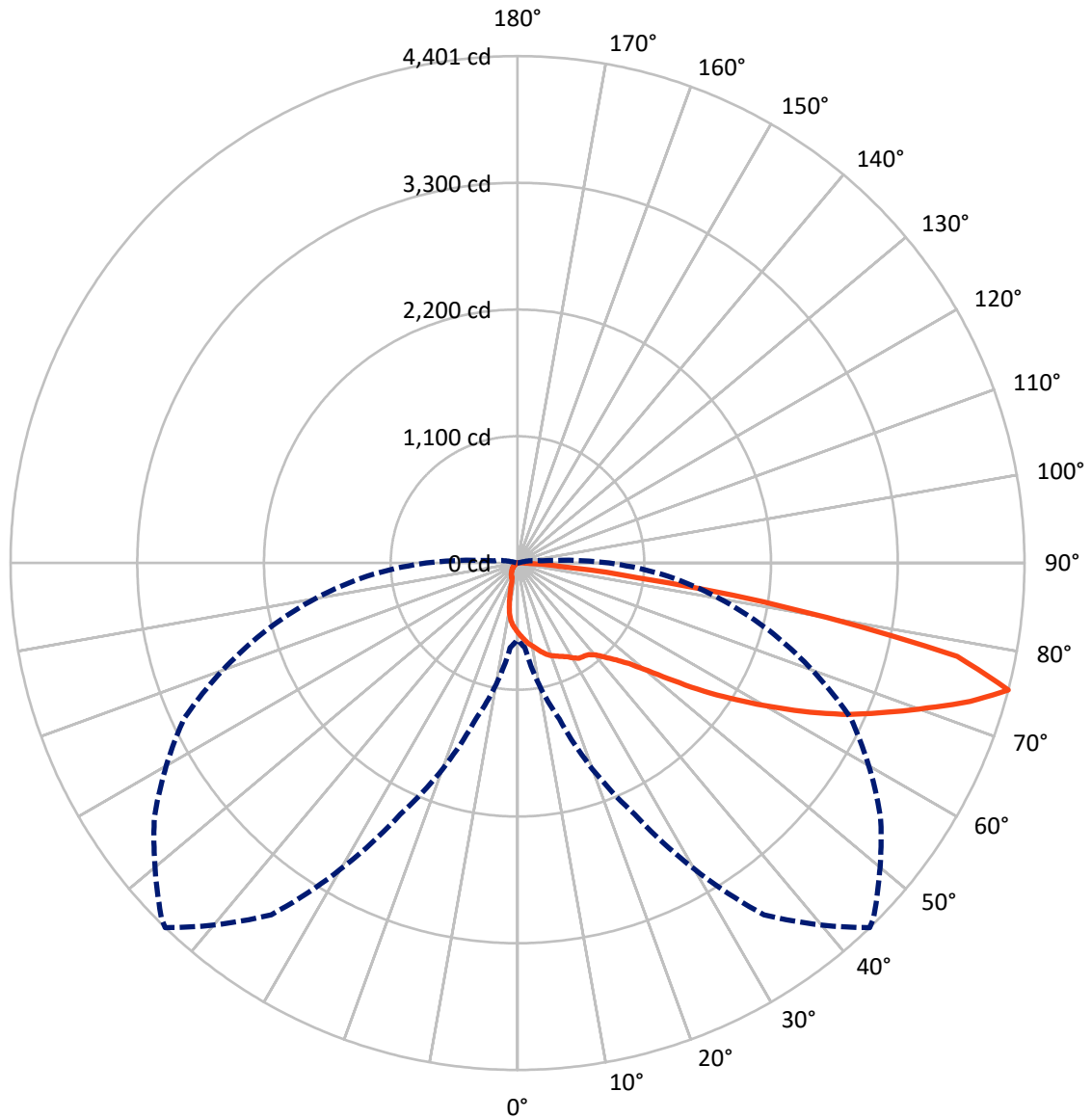


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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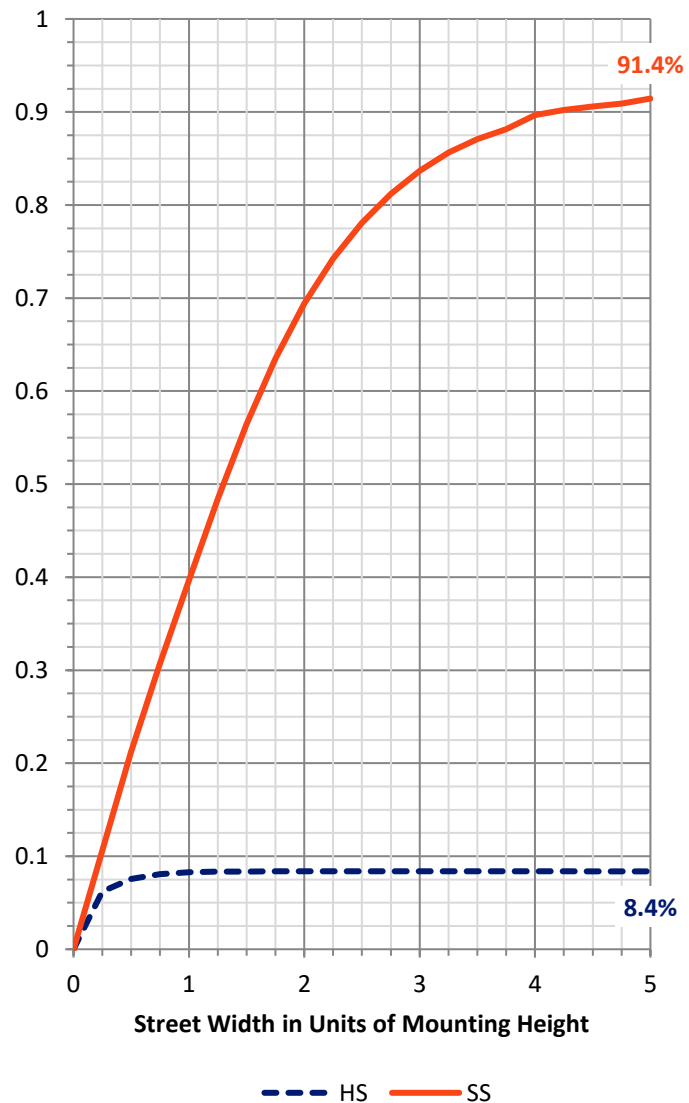
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	467.4	0.0	467.4
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5074.6	0.0	5074.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	5542.0	0.0	5542.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	1.0
10°-20°	159.4	2.9
20°-30°	263.1	4.7
30°-40°	381.8	6.9
40°-50°	620.7	11.2
50°-60°	1094.2	19.7
60°-70°	1572.5	28.4
70°-80°	1259.3	22.7
80°-90°	134.2	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°	5542.0	100.0
0°-180°	5542.0	100.0

Coefficient of Utilization



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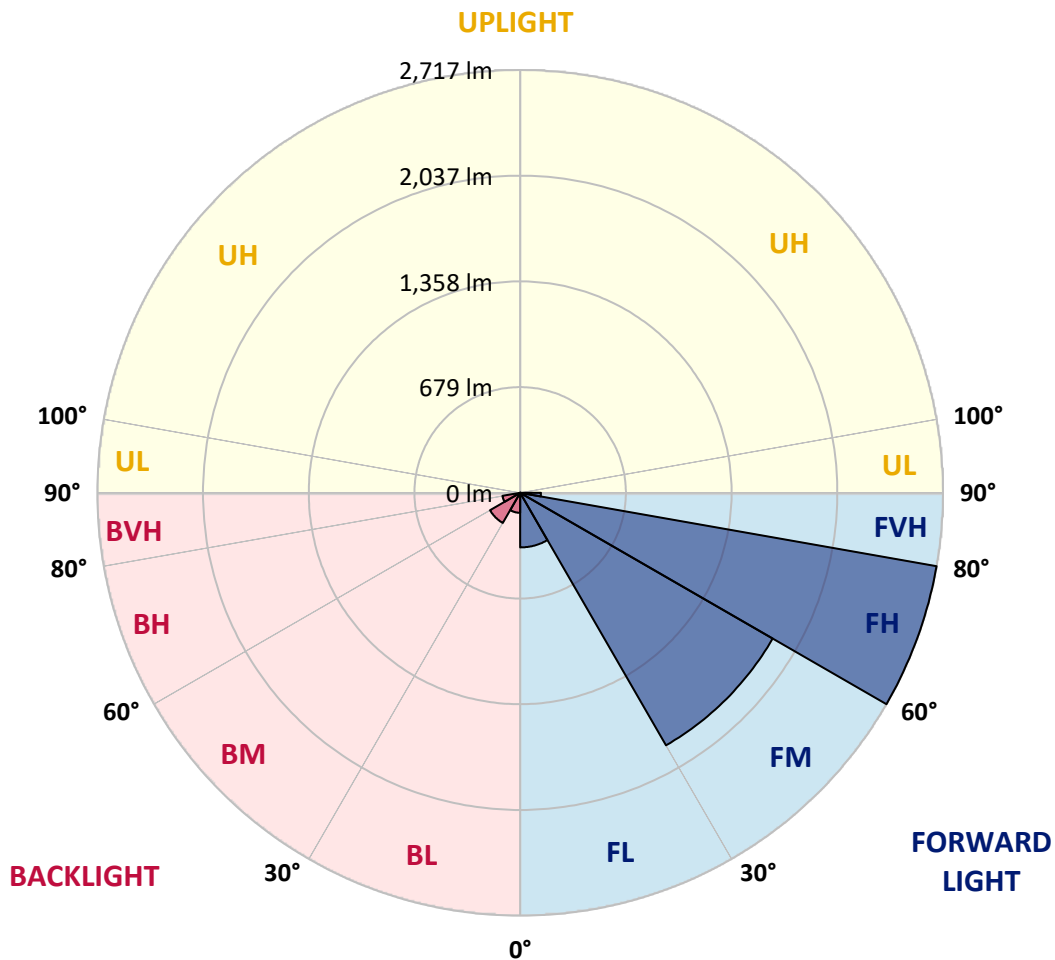
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	351.0	6.3			
FM	(30°-60°)	1873.3	33.8			
FH	(60°-80°)	2716.6	49.0			G2/5000
FVH	(80°-90°)	133.8	2.4			G2/225
BL	(0°-30°)	128.4	2.3	B1/500		
BM	(30°-60°)	223.4	4.0	B1/1000		
BH	(60°-80°)	115.2	2.1	B1/500		G1/500
BVH	(80°-90°)	0.3	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°	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2
2.5°	657.4	656.4	653.3	648.2	643.1	638.0	637.0	628.8	619.6	612.4	606.3
5°	715.7	714.7	709.6	698.3	687.1	673.8	672.8	653.3	635.9	616.5	600.2
7.5°	776.0	774.0	764.8	747.4	728.0	707.5	705.5	676.8	651.3	625.7	602.2
10°	823.0	821.0	807.7	787.3	760.7	735.1	732.1	702.4	676.8	644.1	612.4
12.5°	869.1	865.0	847.6	825.1	792.4	767.8	764.8	734.1	703.4	669.7	630.8
15°	912.0	906.9	890.5	861.9	827.1	803.6	801.6	768.9	737.2	698.3	655.4
17.5°	941.6	939.6	920.2	888.5	854.7	835.3	833.3	799.5	767.8	726.9	680.9
20°	957.0	957.0	938.6	903.8	873.1	859.9	856.8	825.1	794.4	755.6	707.5
22.5°	960.0	963.1	948.8	911.0	888.5	877.2	875.2	847.6	817.9	782.1	737.2
25°	966.2	966.2	959.0	918.1	901.8	898.7	897.7	873.1	846.6	810.8	766.8
27.5°	973.3	973.3	968.2	928.4	922.2	921.2	920.2	908.9	887.5	845.5	801.6
30°	991.7	992.8	988.7	948.8	944.7	956.0	958.0	951.9	925.3	873.1	837.4
32.5°	1037.8	1028.6	1017.3	963.1	970.3	984.6	985.6	973.3	944.7	902.8	880.3
35°	1153.3	1099.1	1048.0	975.4	978.5	992.8	994.8	993.8	976.4	940.6	929.4
37.5°	1260.6	1184.0	1111.4	1004.0	993.8	1009.1	1013.2	1030.6	1017.3	992.8	995.8
40°	1323.0	1293.4	1242.2	1082.7	1024.5	1048.0	1052.1	1078.6	1073.5	1063.3	1082.7
42.5°	1515.2	1517.3	1462.1	1200.3	1080.7	1118.5	1123.6	1145.1	1152.3	1157.4	1204.4
45°	1738.1	1745.3	1732.0	1412.0	1187.0	1199.3	1206.5	1235.1	1261.7	1294.4	1380.3
47.5°	2006.0	1999.8	1950.8	1670.6	1372.1	1303.6	1308.7	1363.9	1409.9	1481.5	1604.2
50°	2243.2	2258.5	2165.5	1911.9	1632.8	1468.2	1463.1	1517.3	1600.1	1700.3	1854.7
52.5°	2482.4	2459.9	2334.2	2151.2	1941.6	1692.1	1676.8	1706.4	1823.0	1941.6	2100.0
55°	2545.8	2547.9	2504.9	2412.9	2199.2	1964.1	1938.5	1936.5	2081.6	2162.4	2357.7
57.5°	2670.6	2675.7	2685.9	2704.3	2603.1	2236.0	2209.4	2180.8	2321.9	2368.9	2616.4
60°	2797.3	2803.5	2865.8	2965.0	2897.5	2529.5	2500.8	2433.4	2512.1	2575.5	2888.3
62.5°	2781.0	2823.9	3004.9	3202.2	3194.0	2851.5	2815.7	2653.2	2703.3	2758.5	3137.8
65°	2511.1	2557.1	2964.0	3267.6	3491.6	3169.5	3111.2	2880.1	2883.2	2949.7	3378.1
67.5°	2269.8	2319.9	2708.4	3240.0	3687.9	3454.7	3394.4	3108.1	3060.1	3170.5	3506.9
70°	2130.7	2180.8	2504.9	3154.2	3743.1	3770.7	3718.5	3368.9	3270.7	3371.9	3362.7
72.5°	1667.6	1746.3	2245.2	2990.6	3802.4	4109.1	4068.2	3699.1	3449.6	3161.3	2560.1
75°	664.6	737.2	1401.7	2406.8	3727.7	4400.5	4368.8	3847.4	3193.0	2257.5	1310.7
77.5°	200.4	214.7	389.5	1190.1	2732.9	3901.5	3891.3	3234.9	2259.5	1048.0	357.8
80°	66.5	73.6	119.6	328.2	1247.3	2437.4	2483.4	2061.2	1026.5	240.3	72.6
82.5°	27.6	30.7	60.3	131.9	441.7	1050.0	1034.7	923.2	357.8	149.3	26.6
85°	7.2	9.2	27.6	75.7	161.5	361.9	380.3	309.8	202.4	123.7	8.2
87.5°	0.0	0.0	13.3	30.7	72.6	109.4	114.5	94.1	114.5	93.0	4.1
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°	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2	603.2
2.5°	601.2	596.1	586.9	580.7	572.6	570.5	566.4	561.3	560.3	555.2	556.2
5°	591.0	582.8	566.4	555.2	541.9	537.8	530.6	525.5	521.4	514.3	515.3
7.5°	588.9	576.6	554.1	532.7	511.2	495.9	474.4	457.0	442.7	427.4	430.4
10°	596.1	580.7	549.0	519.4	480.5	431.5	375.2	338.4	320.0	301.6	303.7
12.5°	610.4	592.0	551.1	506.1	427.4	343.5	265.8	215.7	202.4	194.3	195.3
15°	631.9	609.4	557.2	480.5	355.8	248.4	176.9	155.4	160.5	163.6	163.6
17.5°	654.3	628.8	562.3	434.5	275.0	173.8	144.2	142.1	149.3	156.4	156.4
20°	682.0	649.2	563.4	376.2	198.3	141.1	136.0	136.0	141.1	149.3	149.3
22.5°	708.5	671.7	554.1	309.8	151.3	130.9	130.9	130.9	133.9	142.1	143.1
25°	740.2	699.3	534.7	239.2	129.8	124.7	124.7	125.8	127.8	135.0	136.0
27.5°	774.0	728.0	502.0	174.8	118.6	117.6	118.6	119.6	120.6	127.8	129.8
30°	812.8	759.7	460.1	130.9	108.4	108.4	111.4	113.5	113.5	119.6	121.7
32.5°	857.8	801.6	410.0	108.4	98.2	97.1	102.2	105.3	105.3	110.4	112.5
35°	914.0	844.5	349.7	96.1	90.0	87.9	90.0	95.1	97.1	101.2	102.2
37.5°	988.7	895.6	285.3	89.0	83.8	79.7	79.7	80.8	84.9	89.0	90.0
40°	1083.8	951.9	221.9	83.8	77.7	73.6	70.5	69.5	68.5	71.6	73.6
42.5°	1203.4	1015.3	165.6	78.7	72.6	66.5	62.4	58.3	53.2	52.1	53.2
45°	1356.7	1093.0	122.7	74.6	69.5	60.3	53.2	46.0	36.8	33.7	34.8
47.5°	1537.7	1173.7	96.1	70.5	67.5	53.2	44.0	31.7	22.5	20.4	21.5
50°	1729.9	1251.4	81.8	65.4	63.4	46.0	31.7	19.4	13.3	13.3	14.3
52.5°	1893.5	1295.4	74.6	61.3	57.3	37.8	20.4	11.2	8.2	8.2	9.2
55°	2052.0	1318.9	69.5	57.3	49.1	26.6	11.2	7.2	5.1	5.1	5.1
57.5°	2215.6	1329.1	63.4	52.1	38.9	16.4	6.1	4.1	3.1	3.1	3.1
60°	2360.8	1309.7	54.2	42.9	25.6	8.2	3.1	3.1	2.0	1.0	1.0
62.5°	2482.4	1272.9	37.8	30.7	15.3	4.1	2.0	1.0	0.0	0.0	0.0
65°	2557.1	1213.6	24.5	20.4	9.2	3.1	1.0	0.0	0.0	0.0	0.0
67.5°	2535.6	1102.2	15.3	13.3	4.1	2.0	1.0	0.0	0.0	0.0	0.0
70°	2288.2	903.8	11.2	8.2	3.1	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1649.2	611.4	8.2	5.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	793.4	217.8	5.1	4.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	194.3	48.1	3.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	42.9	9.2	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.3	4.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	1.0	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)