

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: P397830

Luminaire Tested: **ARCH-S-PA1-50-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397830
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-PA1-50-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 4635 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G2

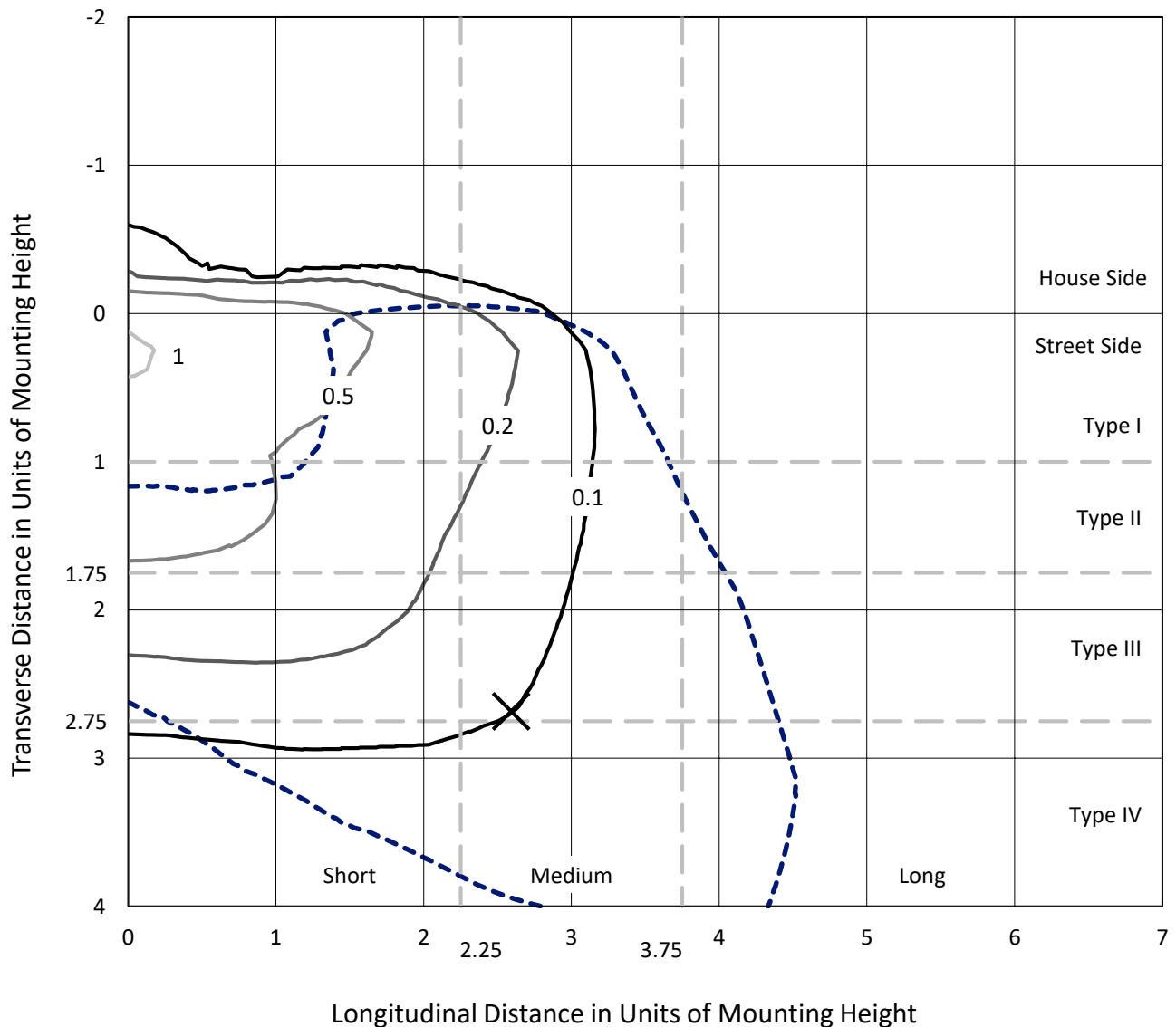
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397830
 CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

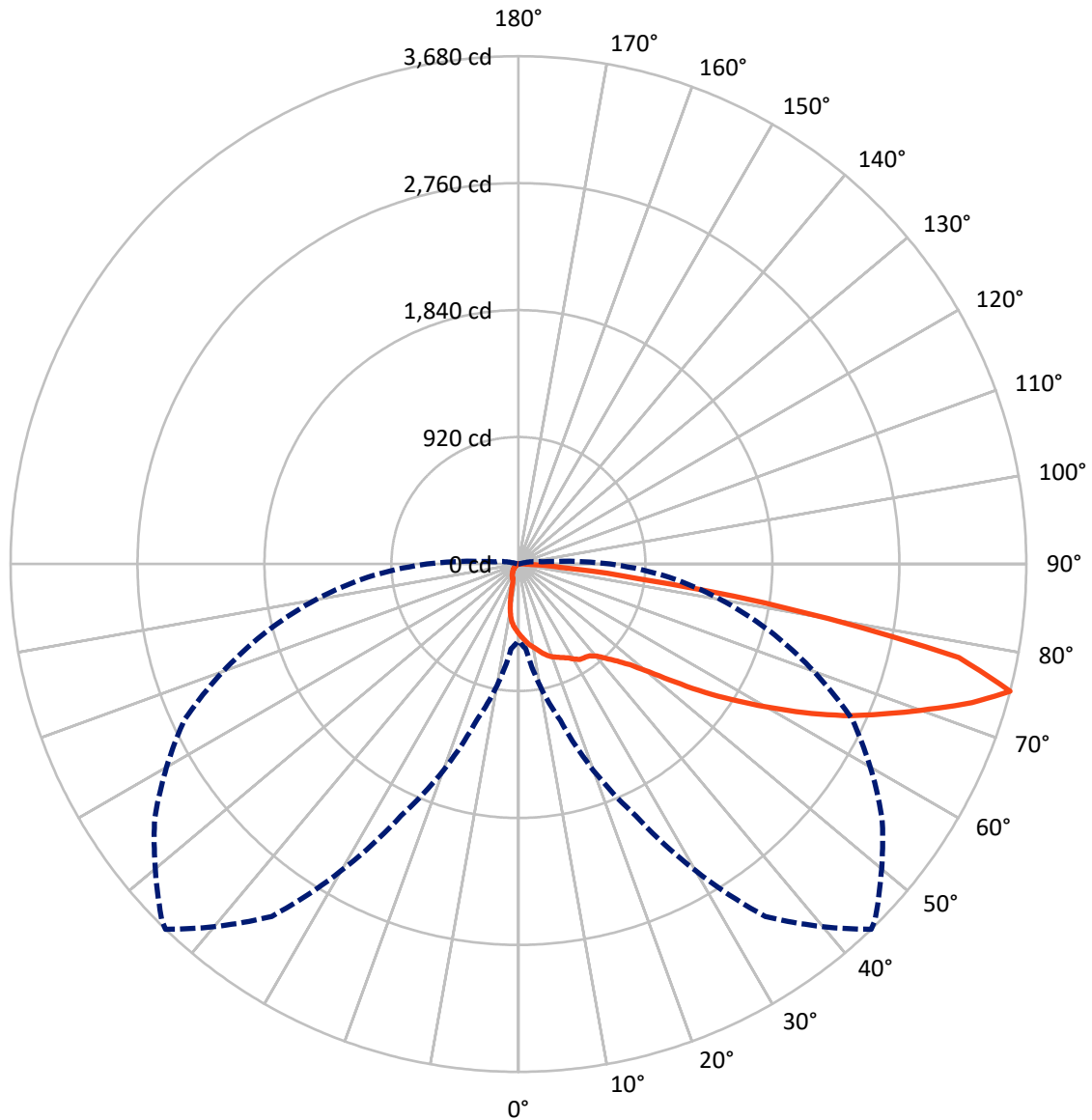
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397830
CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P397830

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

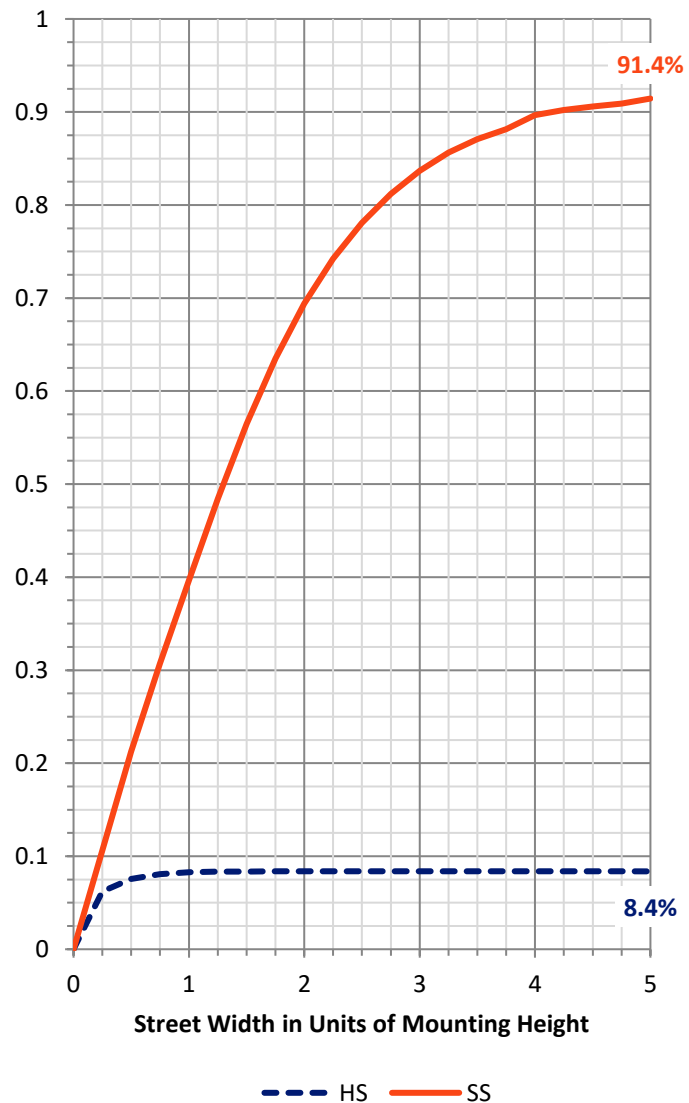
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	390.9	0.0	390.9
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4244.1	0.0	4244.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	4635.0	0.0	4635.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	1.0
10°-20°	133.3	2.9
20°-30°	220.0	4.7
30°-40°	319.3	6.9
40°-50°	519.1	11.2
50°-60°	915.1	19.7
60°-70°	1315.2	28.4
70°-80°	1053.2	22.7
80°-90°	112.2	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°	4635.0	100.0
0°-180°	4635.0	100.0



REPORT NUMBER: P397830

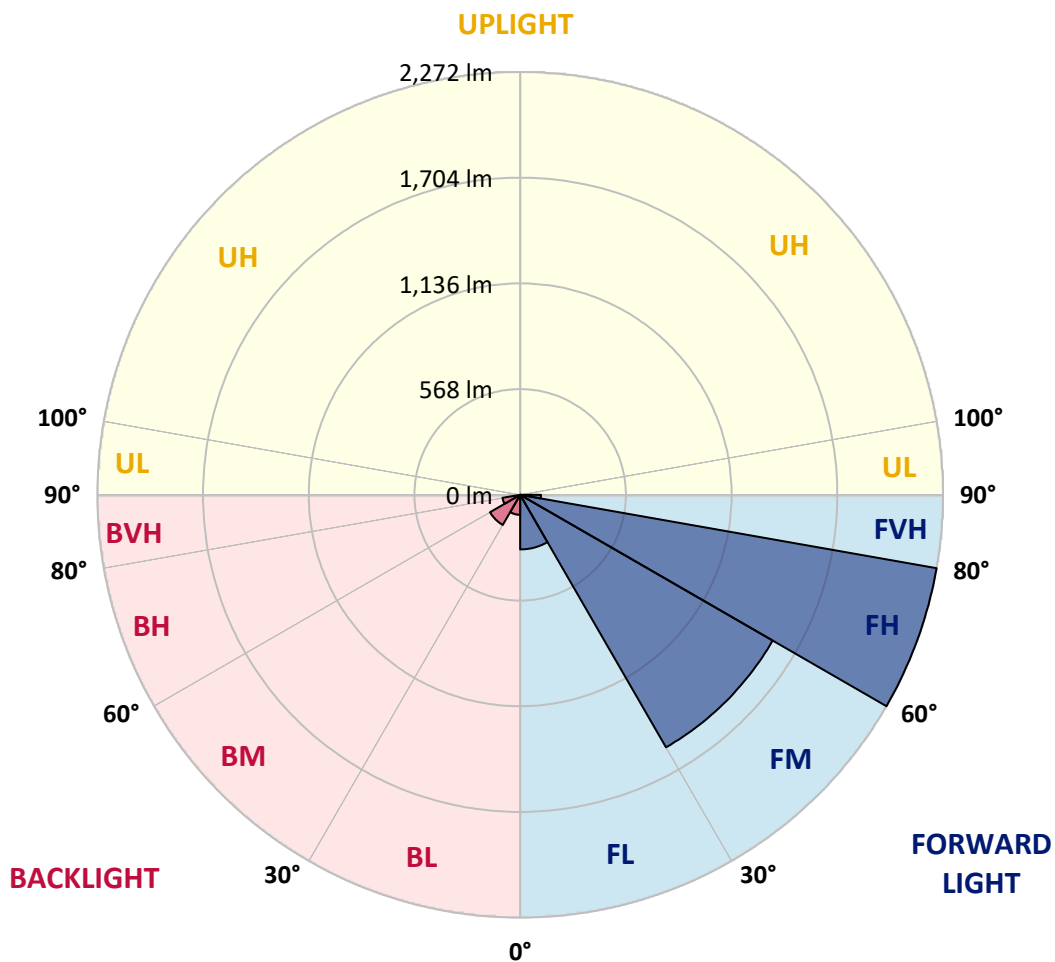
CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.5	6.3			
FM	(30°-60°)	1566.7	33.8			
FH	(60°-80°)	2272.0	49.0			G2/5000
FVH	(80°-90°)	111.9	2.4			G2/225
BL	(0°-30°)	107.4	2.3	B0/110		
BM	(30°-60°)	186.8	4.0	B0/220		
BH	(60°-80°)	96.4	2.1	B0/110		G0/110
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: B0-U0-G2

Type IV Medium





REPORT NUMBER: P397830

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5
2.5°	549.8	549.0	546.4	542.1	537.9	533.6	532.7	525.9	518.2	512.2	507.1
5°	598.6	597.7	593.4	584.0	574.6	563.5	562.6	546.4	531.9	515.6	501.9
7.5°	649.0	647.3	639.6	625.1	608.8	591.7	590.0	566.1	544.7	523.3	503.6
10°	688.3	686.6	675.5	658.4	636.2	614.8	612.2	587.4	566.1	538.7	512.2
12.5°	726.8	723.4	708.9	690.1	662.7	642.2	639.6	614.0	588.3	560.1	527.6
15°	762.7	758.5	744.8	720.8	691.8	672.1	670.4	643.0	616.5	584.0	548.1
17.5°	787.5	785.8	769.6	743.1	714.9	698.6	696.9	668.7	642.2	608.0	569.5
20°	800.4	800.4	785.0	755.9	730.2	719.1	716.6	690.1	664.4	631.9	591.7
22.5°	802.9	805.5	793.5	761.9	743.1	733.7	732.0	708.9	684.1	654.1	616.5
25°	808.1	808.1	802.1	767.9	754.2	751.6	750.8	730.2	708.0	678.1	641.3
27.5°	814.0	814.0	809.8	776.4	771.3	770.4	769.6	760.2	742.2	707.2	670.4
30°	829.4	830.3	826.9	793.5	790.1	799.5	801.2	796.1	773.9	730.2	700.3
32.5°	867.9	860.2	850.8	805.5	811.5	823.5	824.3	814.0	790.1	755.0	736.2
35°	964.5	919.2	876.5	815.8	818.3	830.3	832.0	831.1	816.6	786.7	777.3
37.5°	1054.3	990.2	929.5	839.7	831.1	844.0	847.4	861.9	850.8	830.3	832.9
40°	1106.5	1081.7	1038.9	905.5	856.8	876.5	879.9	902.1	897.8	889.3	905.5
42.5°	1267.2	1269.0	1222.8	1003.9	903.8	935.5	939.7	957.7	963.7	968.0	1007.3
45°	1453.7	1459.6	1448.5	1180.9	992.8	1003.0	1009.0	1032.9	1055.2	1082.5	1154.4
47.5°	1677.7	1672.6	1631.5	1397.2	1147.5	1090.2	1094.5	1140.7	1179.2	1239.0	1341.6
50°	1876.1	1888.9	1811.1	1599.0	1365.6	1227.9	1223.6	1269.0	1338.2	1422.0	1551.1
52.5°	2076.2	2057.3	1952.2	1799.1	1623.8	1415.2	1402.3	1427.1	1524.6	1623.8	1756.4
55°	2129.2	2130.9	2095.0	2018.0	1839.3	1642.6	1621.2	1619.5	1741.0	1808.5	1971.8
57.5°	2233.5	2237.8	2246.3	2261.7	2177.1	1870.1	1847.8	1823.9	1941.9	1981.2	2188.2
60°	2339.5	2344.7	2396.8	2479.8	2423.3	2115.5	2091.5	2035.1	2101.0	2154.0	2415.6
62.5°	2325.8	2361.8	2513.1	2678.1	2671.3	2384.8	2354.9	2219.0	2260.9	2307.0	2624.3
65°	2100.1	2138.6	2478.9	2732.9	2920.1	2650.8	2602.0	2408.8	2411.3	2466.9	2825.2
67.5°	1898.3	1940.2	2265.1	2709.8	3084.3	2889.3	2838.9	2599.5	2559.3	2651.6	2933.0
70°	1782.0	1823.9	2095.0	2637.9	3130.5	3153.6	3110.0	2817.5	2735.4	2820.1	2812.4
72.5°	1394.6	1460.5	1877.8	2501.1	3180.1	3436.6	3402.4	3093.7	2885.1	2643.9	2141.1
75°	555.8	616.5	1172.3	2012.9	3117.7	3680.3	3653.8	3217.7	2670.4	1888.0	1096.2
77.5°	167.6	179.6	325.8	995.3	2285.7	3263.0	3254.5	2705.5	1889.7	876.5	299.3
80°	55.6	61.6	100.0	274.5	1043.2	2038.5	2077.0	1723.9	858.5	200.9	60.7
82.5°	23.1	25.7	50.5	110.3	369.4	878.2	865.3	772.1	299.3	124.8	22.2
85°	6.0	7.7	23.1	63.3	135.1	302.7	318.1	259.1	169.3	103.5	6.8
87.5°	0.0	0.0	11.1	25.7	60.7	91.5	95.8	78.7	95.8	77.8	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397830

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5
2.5°	502.8	498.5	490.8	485.7	478.8	477.1	473.7	469.4	468.6	464.3	465.2
5°	494.2	487.4	473.7	464.3	453.2	449.8	443.8	439.5	436.1	430.1	431.0
7.5°	492.5	482.3	463.5	445.5	427.5	414.7	396.8	382.2	370.3	357.4	360.0
10°	498.5	485.7	459.2	434.4	401.9	360.8	313.8	283.0	267.6	252.3	254.0
12.5°	510.5	495.1	460.9	423.3	357.4	287.3	222.3	180.4	169.3	162.5	163.3
15°	528.4	509.6	466.0	401.9	297.6	207.8	147.9	130.0	134.2	136.8	136.8
17.5°	547.3	525.9	470.3	363.4	230.0	145.4	120.6	118.9	124.8	130.8	130.8
20°	570.3	543.0	471.2	314.7	165.9	118.0	113.7	113.7	118.0	124.8	124.8
22.5°	592.6	561.8	463.5	259.1	126.6	109.5	109.5	109.5	112.0	118.9	119.7
25°	619.1	584.9	447.2	200.1	108.6	104.3	104.3	105.2	106.9	112.9	113.7
27.5°	647.3	608.8	419.8	146.2	99.2	98.3	99.2	100.0	100.9	106.9	108.6
30°	679.8	635.3	384.8	109.5	90.6	90.6	93.2	94.9	94.9	100.0	101.8
32.5°	717.4	670.4	342.9	90.6	82.1	81.2	85.5	88.1	88.1	92.3	94.1
35°	764.4	706.3	292.4	80.4	75.2	73.5	75.2	79.5	81.2	84.7	85.5
37.5°	826.9	749.1	238.6	74.4	70.1	66.7	66.7	67.6	71.0	74.4	75.2
40°	906.4	796.1	185.6	70.1	65.0	61.6	59.0	58.1	57.3	59.9	61.6
42.5°	1006.4	849.1	138.5	65.8	60.7	55.6	52.2	48.7	44.5	43.6	44.5
45°	1134.7	914.1	102.6	62.4	58.1	50.5	44.5	38.5	30.8	28.2	29.1
47.5°	1286.1	981.6	80.4	59.0	56.4	44.5	36.8	26.5	18.8	17.1	18.0
50°	1446.8	1046.6	68.4	54.7	53.0	38.5	26.5	16.2	11.1	11.1	12.0
52.5°	1583.6	1083.4	62.4	51.3	47.9	31.6	17.1	9.4	6.8	6.8	7.7
55°	1716.2	1103.1	58.1	47.9	41.0	22.2	9.4	6.0	4.3	4.3	4.3
57.5°	1853.0	1111.6	53.0	43.6	32.5	13.7	5.1	3.4	2.6	2.6	2.6
60°	1974.4	1095.4	45.3	35.9	21.4	6.8	2.6	2.6	1.7	0.9	0.9
62.5°	2076.2	1064.6	31.6	25.7	12.8	3.4	1.7	0.9	0.0	0.0	0.0
65°	2138.6	1015.0	20.5	17.1	7.7	2.6	0.9	0.0	0.0	0.0	0.0
67.5°	2120.6	921.8	12.8	11.1	3.4	1.7	0.9	0.0	0.0	0.0	0.0
70°	1913.7	755.9	9.4	6.8	2.6	0.9	0.0	0.0	0.0	0.0	0.0
72.5°	1379.3	511.3	6.8	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	663.5	182.1	4.3	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	162.5	40.2	2.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.9	7.7	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.0	3.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.9	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)