

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: P573190

Luminaire Tested: **ARCH-S-PA2-40-827-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573190
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-PA2-40-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 420mA 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: 3610 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

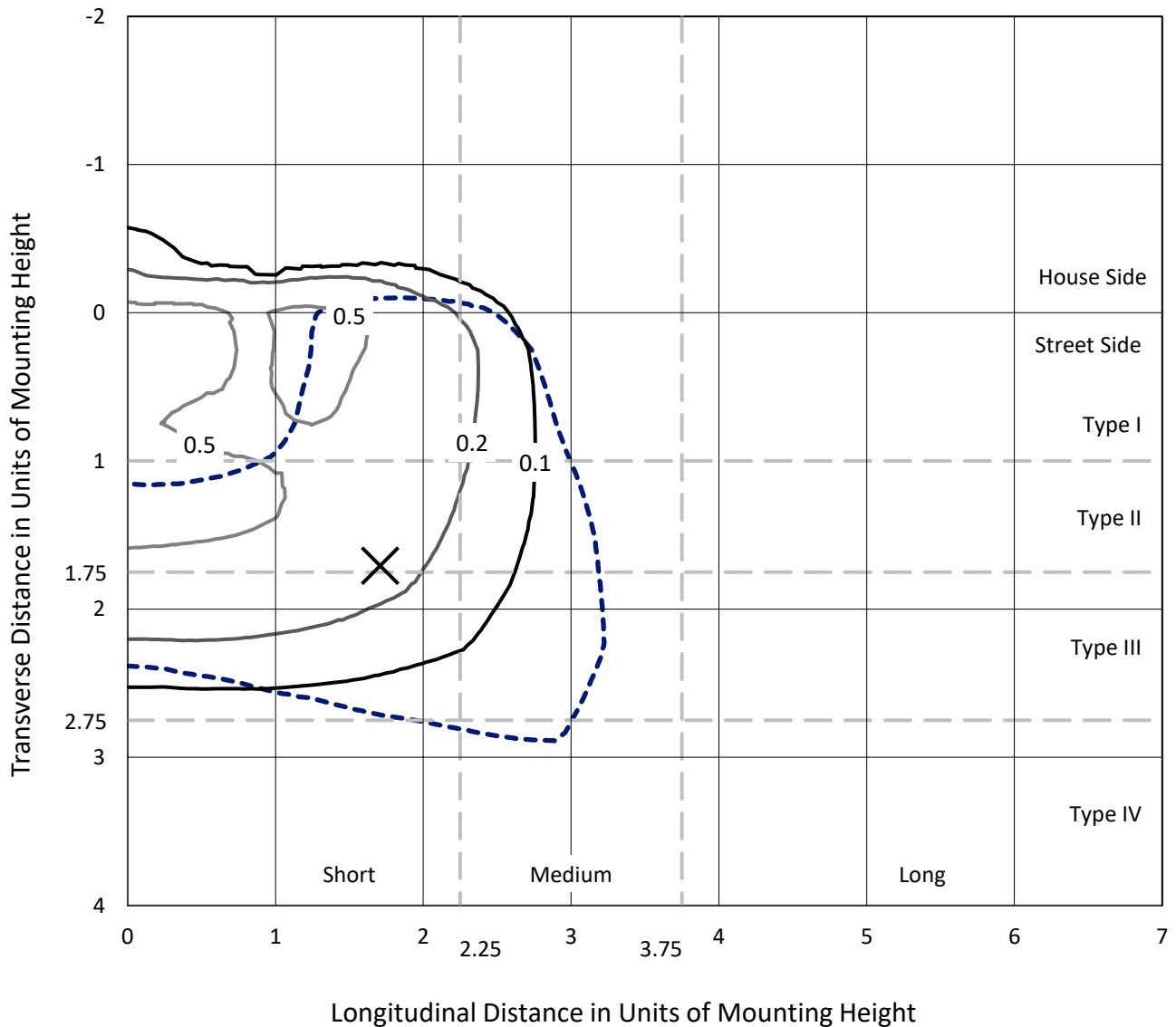
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

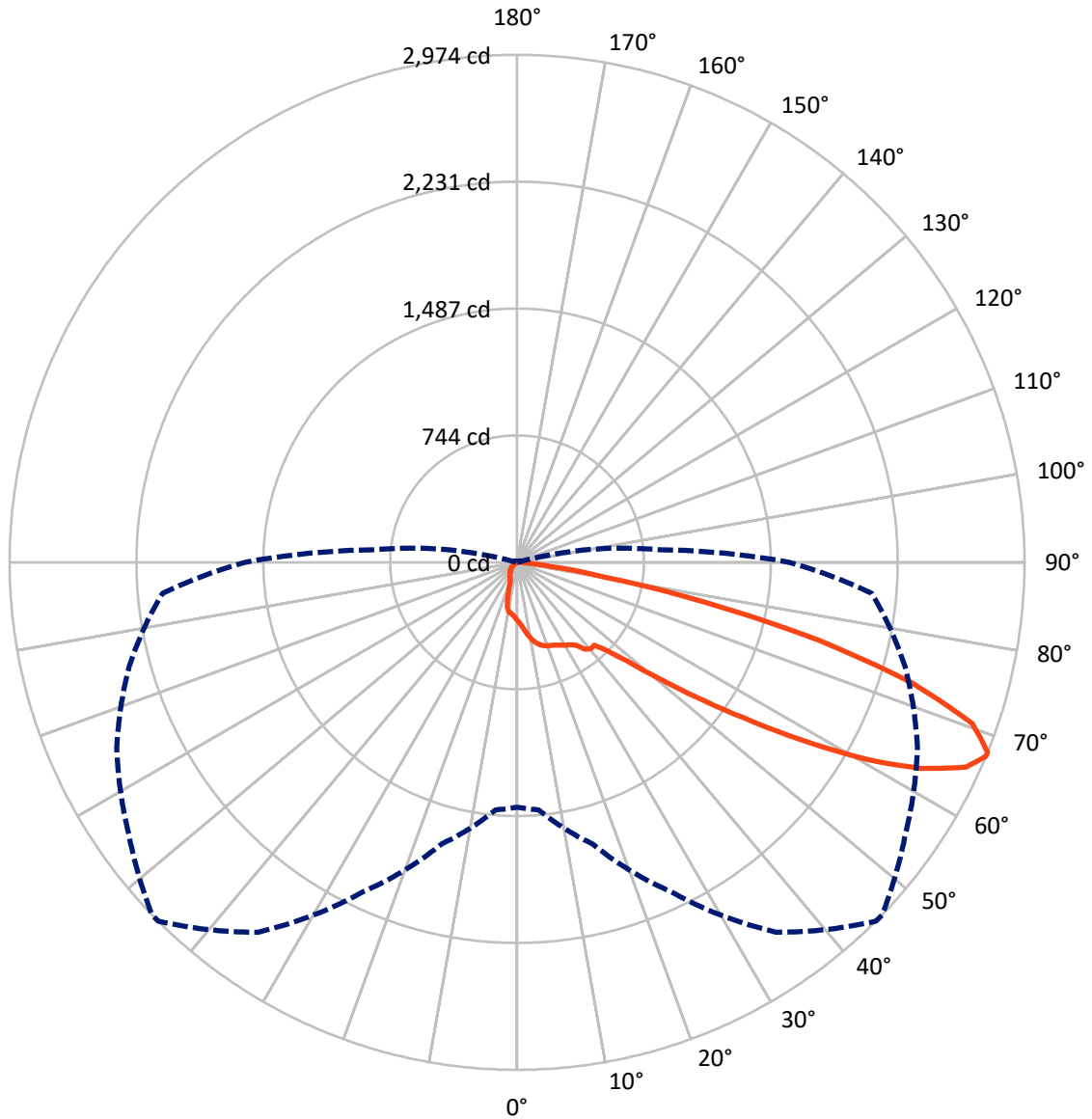
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 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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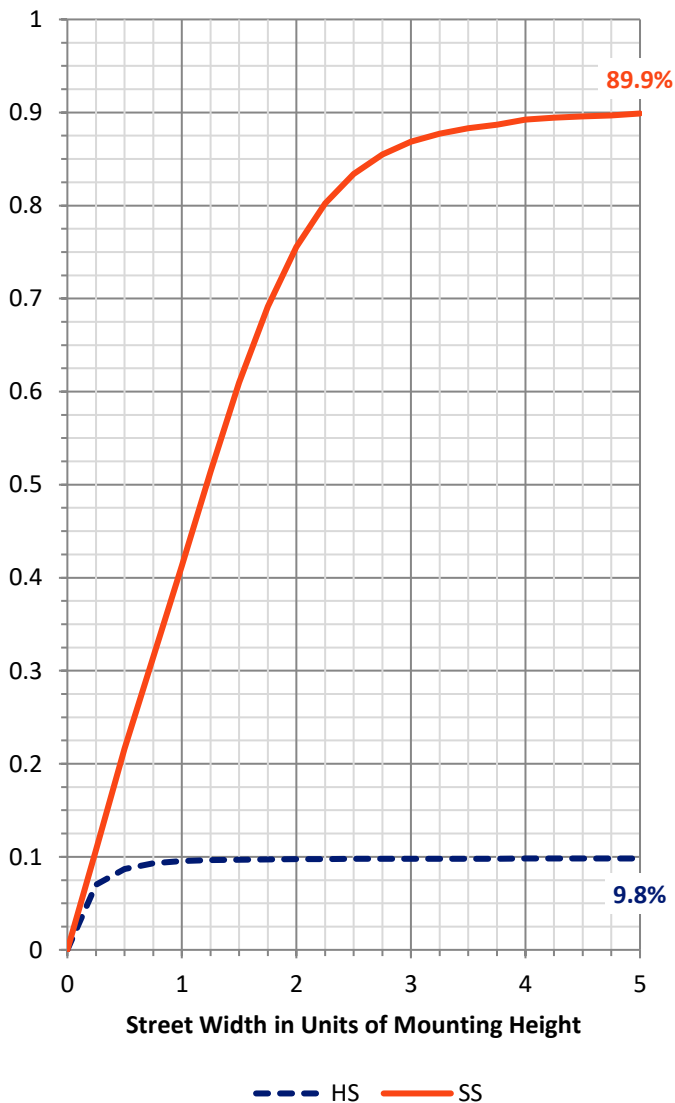
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	357.7	0.0	357.7
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	3252.3	0.0	3252.3
	% Fixture	90.1	0.0	90.1
Total	Lumens	3610.0	0.0	3610.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	0.9
10°-20°	103.6	2.9
20°-30°	165.7	4.6
30°-40°	238.5	6.6
40°-50°	418.4	11.6
50°-60°	881.6	24.4
60°-70°	1219.1	33.8
70°-80°	510.4	14.1
80°-90°	38.6	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°	3610.0	100.0
0°-180°	3610.0	100.0



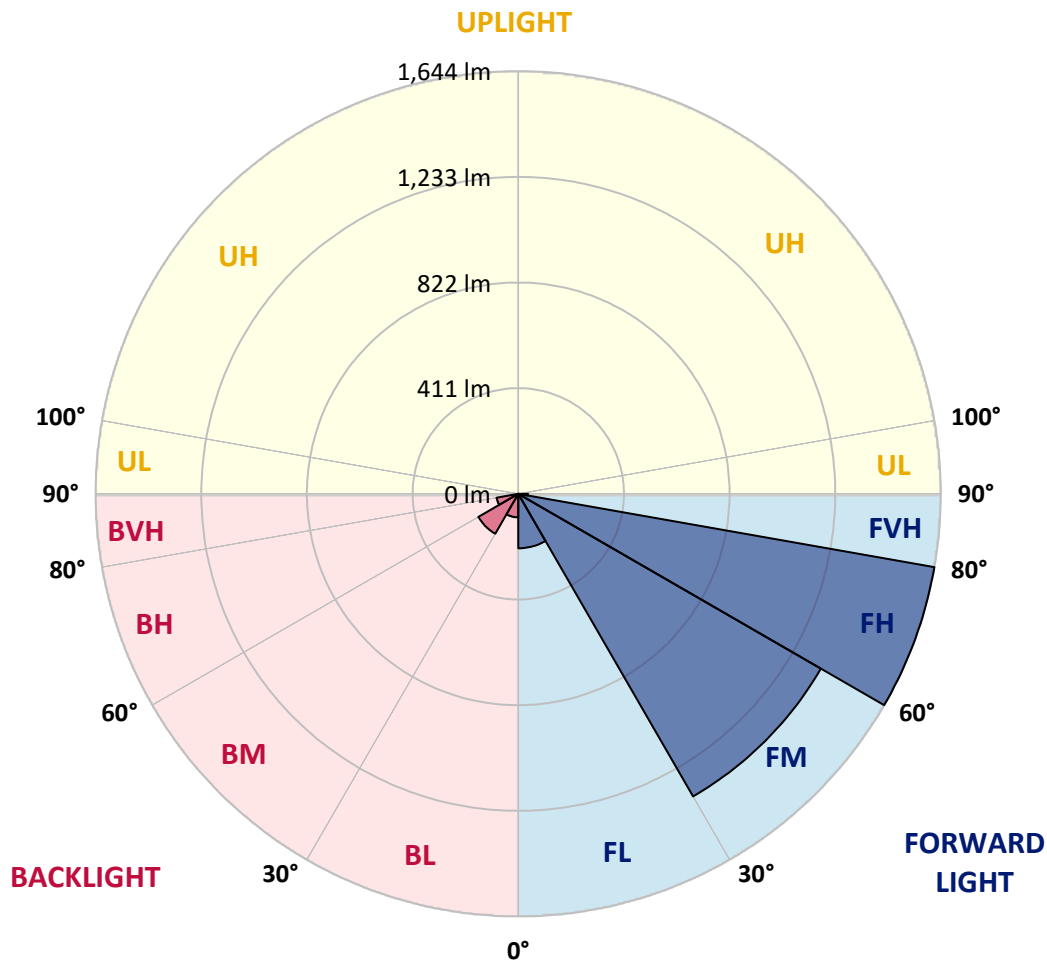
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	211.9	5.9			
FM (30°-60°)	1359.2	37.7			
FH (60°-80°)	1643.9	45.5			G1/1800
FVH (80°-90°)	37.3	1.0			G1/100
BL (0°-30°)	91.7	2.5	B0/110		
BM (30°-60°)	179.2	5.0	B0/220		
BH (60°-80°)	85.5	2.4	B0/110		G0/110
BVH (80°-90°)	1.3	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4
2.5°	380.1	373.4	372.1	370.7	366.7	361.4	362.7	358.7	352.1	348.1	344.1
5°	426.8	420.1	417.4	409.4	401.4	389.4	389.4	378.8	366.7	356.1	345.4
7.5°	474.8	469.4	464.1	452.1	440.1	424.1	422.8	406.8	388.1	372.1	354.7
10°	514.8	510.8	504.1	489.4	473.4	456.1	452.1	437.4	413.4	392.1	369.4
12.5°	546.8	542.8	533.5	518.8	498.8	481.4	480.1	461.4	437.4	414.8	386.8
15°	570.8	564.1	553.5	537.5	517.4	501.4	498.8	482.8	460.1	434.8	401.4
17.5°	574.8	570.8	561.5	544.1	526.8	513.4	512.1	500.1	480.1	453.4	418.8
20°	564.1	562.8	554.8	541.5	528.1	521.4	520.1	512.1	496.1	472.1	437.4
22.5°	548.1	546.8	541.5	534.8	529.5	528.1	528.1	525.4	516.1	493.4	461.4
25°	537.5	536.1	533.5	529.5	529.5	537.5	538.8	541.5	533.5	516.1	481.4
27.5°	538.8	536.1	533.5	529.5	534.8	549.5	550.8	557.5	550.8	534.8	504.1
30°	557.5	553.5	545.5	536.1	542.8	562.8	564.1	572.1	566.8	558.8	529.5
32.5°	586.8	584.1	568.1	552.1	556.1	576.1	578.8	593.5	600.1	588.1	552.1
35°	629.5	620.1	600.1	584.1	581.5	596.1	600.1	624.1	641.5	612.1	565.5
37.5°	664.1	656.1	624.1	598.8	613.5	646.8	648.1	677.5	662.8	614.8	586.8
40°	781.5	780.2	724.2	644.1	628.1	665.5	670.8	676.1	669.5	645.5	633.5
42.5°	970.9	954.9	892.2	769.5	660.1	664.1	666.8	694.8	729.5	718.8	722.8
45°	1176.3	1162.9	1092.2	937.5	769.5	736.2	738.8	784.2	850.9	864.2	885.5
47.5°	1365.6	1344.3	1304.3	1148.3	956.2	858.9	864.2	918.9	1029.6	1058.9	1092.2
50°	1525.7	1511.0	1473.7	1371.0	1185.6	1052.2	1057.6	1102.9	1246.9	1293.6	1336.3
52.5°	1757.7	1737.7	1665.7	1617.7	1477.7	1304.3	1292.3	1340.3	1505.7	1536.3	1593.7
55°	1971.1	1929.8	1887.1	1867.1	1808.4	1605.7	1601.7	1611.0	1748.4	1764.4	1867.1
57.5°	2061.8	2053.8	2089.8	2156.5	2169.8	1960.4	1943.1	1907.1	2015.1	2013.8	2133.8
60°	2119.1	2119.1	2215.2	2380.5	2487.2	2339.2	2315.2	2203.2	2241.8	2243.2	2353.9
62.5°	2083.1	2092.5	2241.8	2491.2	2705.9	2660.6	2644.6	2456.5	2453.9	2423.2	2461.9
65°	1860.4	1876.4	2116.5	2429.9	2785.9	2892.6	2886.0	2672.6	2595.2	2483.2	2396.5
67°	1517.7	1547.0	1837.7	2208.5	2695.3	2972.7	2974.0	2765.9	2596.6	2383.2	2165.8
67.5°	1435.0	1456.3	1708.4	2128.5	2645.9	2974.0	2974.0	2777.9	2588.6	2352.5	2085.8
70°	914.9	920.2	1194.9	1647.0	2260.5	2830.0	2840.6	2687.3	2357.9	1904.4	1464.3
72.5°	452.1	440.1	630.8	1060.2	1696.4	2421.9	2449.9	2295.2	1865.7	1244.3	773.5
75°	177.4	189.4	274.7	564.1	1062.9	1825.7	1847.1	1669.7	1200.3	641.5	305.4
77.5°	78.7	78.7	117.4	253.4	558.8	1120.2	1130.9	1018.9	633.5	264.1	93.4
80°	42.7	45.3	61.3	110.7	281.4	514.8	561.5	505.4	286.7	116.0	32.0
82.5°	21.3	22.7	37.3	62.7	141.4	194.7	205.4	214.7	132.0	72.0	13.3
85°	8.0	9.3	20.0	36.0	64.0	65.3	65.3	84.0	72.0	54.7	6.7
87.5°	1.3	2.7	9.3	14.7	25.3	22.7	20.0	26.7	40.0	34.7	4.0
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°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4
2.5°	341.4	338.7	333.4	329.4	326.7	324.1	321.4	321.4	320.1	320.1	321.4
5°	341.4	336.1	325.4	318.7	313.4	309.4	306.7	306.7	305.4	306.7	308.1
7.5°	348.1	340.1	325.4	313.4	306.7	300.1	297.4	296.1	296.1	297.4	296.1
10°	358.7	348.1	329.4	313.4	304.1	294.7	280.1	266.7	254.7	249.4	248.1
12.5°	372.1	358.7	336.1	317.4	302.7	270.7	230.7	205.4	189.4	181.4	178.7
15°	386.8	370.7	344.1	322.7	282.7	222.7	170.7	142.7	133.4	134.7	136.0
17.5°	402.8	385.4	356.1	320.1	242.7	165.4	125.4	118.7	122.7	126.7	126.7
20°	418.8	400.1	368.1	300.1	190.7	122.7	112.0	113.4	117.4	121.4	121.4
22.5°	440.1	420.1	380.1	265.4	141.4	106.7	106.7	109.4	112.0	116.0	116.0
25°	462.8	442.8	388.1	222.7	105.4	100.0	101.4	104.0	106.7	110.7	110.7
27.5°	486.8	466.8	386.8	172.0	92.0	92.0	93.4	97.4	100.0	104.0	104.0
30°	513.4	496.1	372.1	125.4	85.4	84.0	84.0	88.0	92.0	94.7	96.0
32.5°	536.1	521.4	346.7	94.7	80.0	77.4	76.0	77.4	81.4	84.0	85.4
35°	554.8	549.5	309.4	81.4	74.7	70.7	68.0	66.7	68.0	68.0	69.3
37.5°	589.5	590.8	265.4	76.0	70.7	65.3	60.0	56.0	53.3	52.0	50.7
40°	654.8	653.5	218.7	72.0	66.7	60.0	52.0	46.7	40.0	37.3	37.3
42.5°	746.8	726.8	166.7	68.0	62.7	54.7	44.0	36.0	29.3	28.0	28.0
45°	912.2	829.5	125.4	65.3	58.7	48.0	36.0	26.7	22.7	21.3	21.3
47.5°	1094.9	948.2	100.0	61.3	54.7	42.7	28.0	21.3	17.3	17.3	17.3
50°	1296.3	1061.6	84.0	57.3	48.0	36.0	22.7	17.3	16.0	14.7	16.0
52.5°	1516.3	1150.9	73.3	52.0	41.3	29.3	18.7	16.0	13.3	13.3	13.3
55°	1713.7	1210.9	61.3	45.3	34.7	24.0	17.3	13.3	12.0	10.7	9.3
57.5°	1892.4	1242.9	49.3	38.7	26.7	20.0	14.7	10.7	9.3	6.7	6.7
60°	1984.4	1213.6	38.7	30.7	21.3	16.0	12.0	9.3	6.7	4.0	4.0
62.5°	1999.1	1137.6	30.7	24.0	18.7	13.3	9.3	6.7	4.0	2.7	2.7
65°	1871.1	1004.2	25.3	20.0	14.7	10.7	8.0	5.3	2.7	1.3	1.3
67°	1641.7	864.2	22.7	17.3	13.3	9.3	6.7	4.0	2.7	1.3	0.0
67.5°	1596.4	838.9	21.3	17.3	13.3	9.3	6.7	4.0	2.7	1.3	0.0
70°	1048.2	580.1	20.0	16.0	12.0	8.0	5.3	4.0	1.3	0.0	0.0
72.5°	572.1	292.1	18.7	14.7	10.7	8.0	5.3	2.7	1.3	0.0	0.0
75°	209.4	110.7	16.0	13.3	9.3	8.0	5.3	2.7	1.3	0.0	0.0
77.5°	70.7	38.7	14.7	13.3	10.7	8.0	5.3	2.7	1.3	0.0	0.0
80°	24.0	17.3	12.0	10.7	8.0	6.7	5.3	2.7	1.3	0.0	0.0
82.5°	9.3	5.3	4.0	4.0	4.0	5.3	5.3	4.0	1.3	0.0	0.0
85°	4.0	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0
87.5°	4.0	2.7	1.3	1.3	1.3	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)