

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: P397772

Luminaire Tested: **ARCH-S-PA1-40-740-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397772  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-740-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4163 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

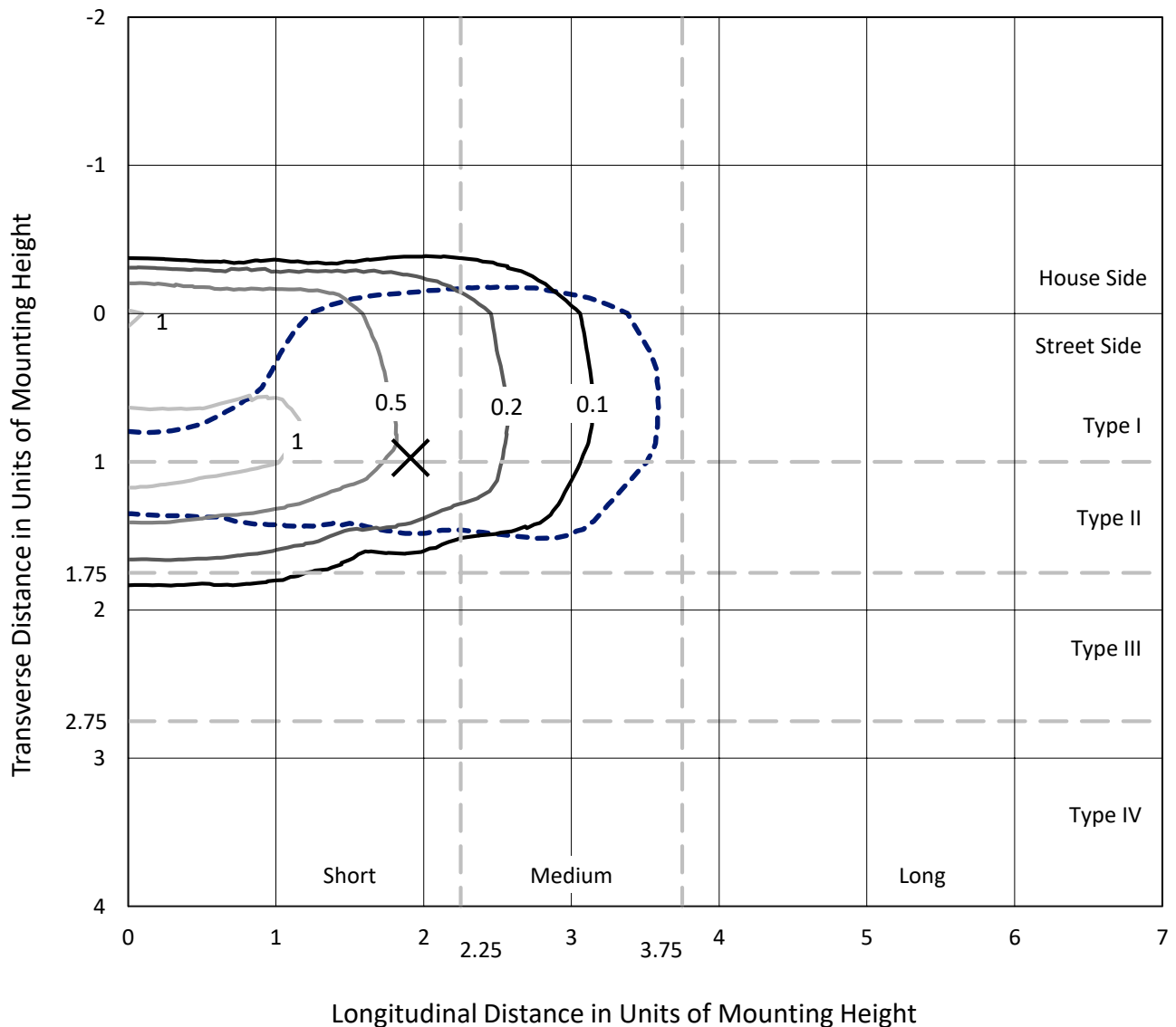
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

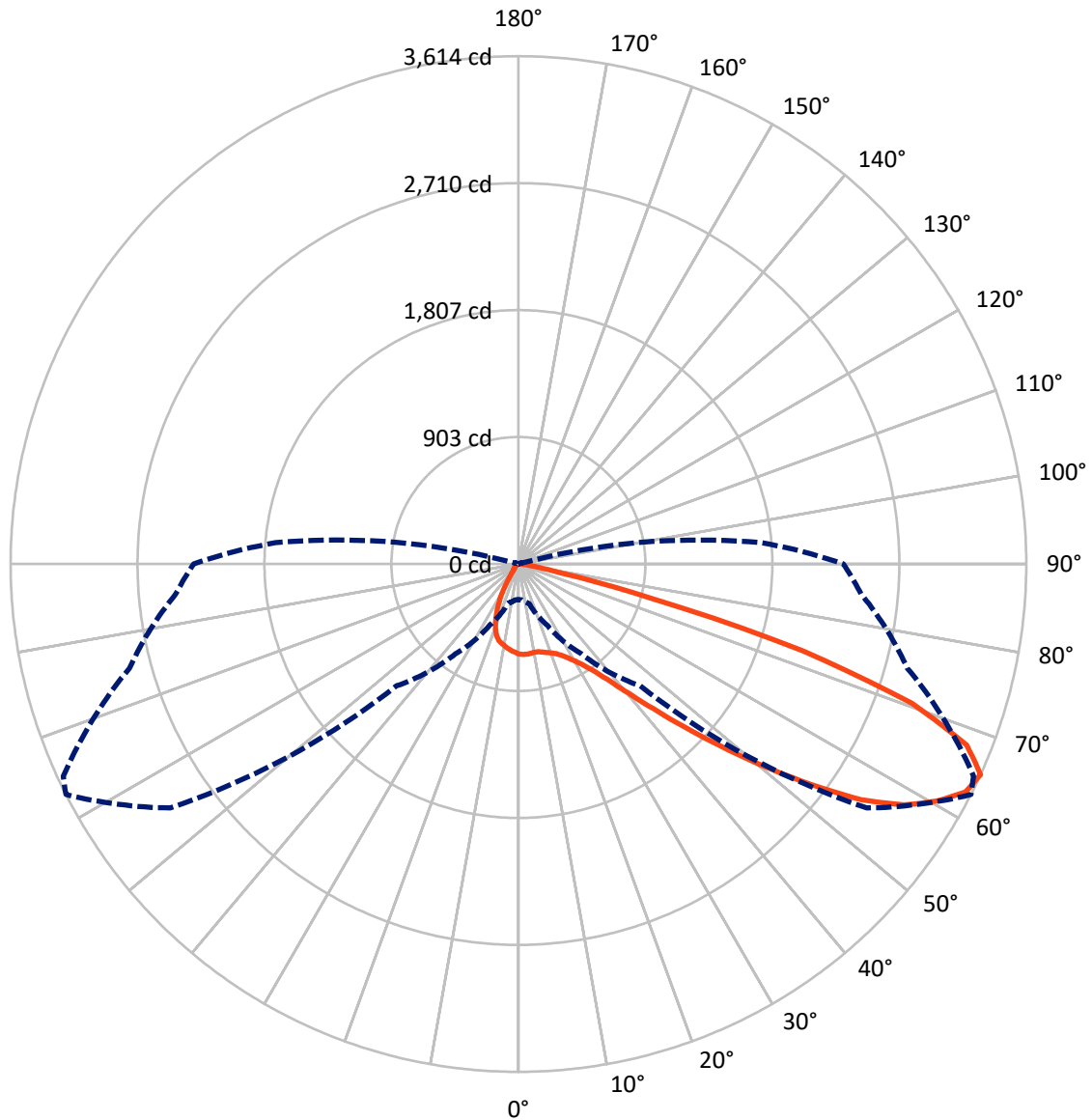
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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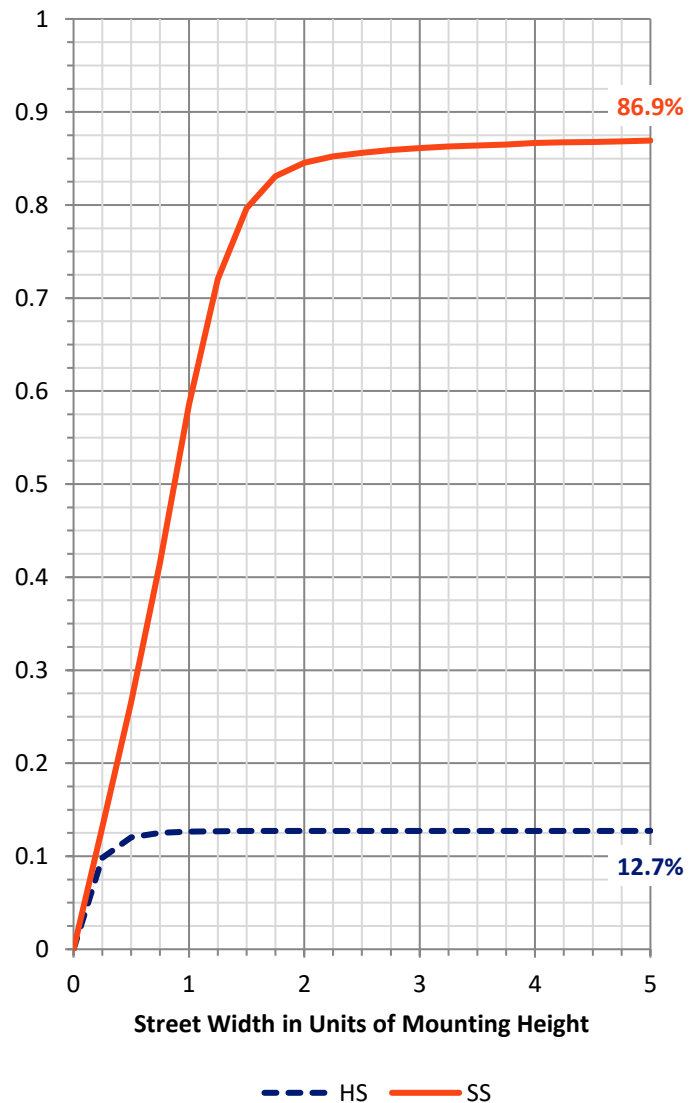
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	535.8	0.0	535.8
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	3627.2	0.0	3627.2
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	4163.0	0.0	4163.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.5	1.4
10°-20°	144.4	3.5
20°-30°	214.0	5.1
30°-40°	397.3	9.5
40°-50°	841.6	20.2
50°-60°	1163.7	28.0
60°-70°	931.6	22.4
70°-80°	387.1	9.3
80°-90°	24.9	0.6
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°	4163.0	100.0
0°-180°	4163.0	100.0



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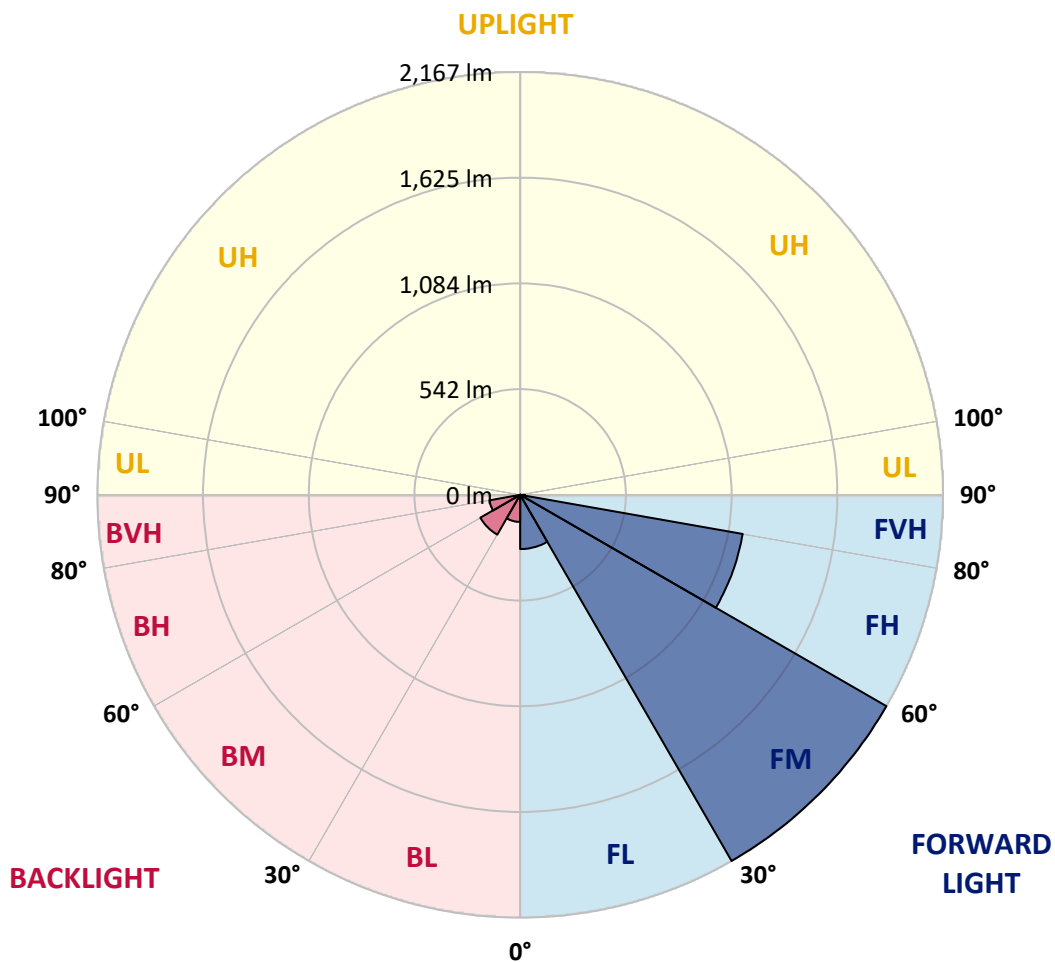
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	278.0	6.7			
FM (30°-60°)	2167.3	52.1			
FH (60°-80°)	1158.2	27.8			G1/1800
FVH (80°-90°)	23.7	0.6			G1/100
BL (0°-30°)	138.9	3.3	B1/500		
BM (30°-60°)	235.4	5.7	B1/1000		
BH (60°-80°)	160.4	3.9	B1/500		G1/500
BVH (80°-90°)	1.1	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3
2.5°	652.3	650.7	649.2	648.4	648.4	647.6	644.5	643.7	642.1	640.5	639.0
5°	646.0	643.7	642.9	643.7	644.5	646.0	644.5	644.5	642.9	641.3	638.2
7.5°	630.3	628.7	629.5	631.9	632.7	638.2	639.0	641.3	641.3	639.7	637.4
10°	611.4	610.7	610.7	614.6	618.5	626.4	631.9	638.2	639.0	639.0	635.0
12.5°	597.3	596.5	598.9	603.6	611.4	621.7	631.1	640.5	642.1	642.9	636.6
15°	588.7	588.7	591.8	601.2	612.2	626.4	637.4	650.0	651.5	650.7	642.1
17.5°	580.8	581.6	587.9	603.6	616.2	635.0	648.4	662.5	663.3	662.5	648.4
20°	577.7	579.2	588.7	609.1	623.2	644.5	661.7	675.9	676.7	673.5	654.7
22.5°	586.3	587.1	598.9	620.9	634.2	657.8	679.8	693.2	694.0	689.3	664.1
25°	616.2	616.2	626.4	645.2	657.0	680.6	704.2	719.9	719.9	714.4	685.3
27.5°	686.1	679.8	677.5	683.0	686.9	712.0	737.2	756.8	756.1	748.2	712.8
30°	821.3	805.6	780.4	752.1	738.0	755.3	778.8	804.0	803.2	790.6	746.6
32.5°	1048.4	1025.6	965.9	891.2	830.7	811.1	833.1	860.6	861.4	846.4	800.9
35°	1366.7	1330.6	1223.7	1119.9	981.6	907.0	913.2	943.1	952.5	944.7	892.0
37.5°	1673.2	1640.2	1538.0	1394.2	1206.4	1053.9	1027.2	1053.1	1064.1	1064.1	1008.3
40°	1982.1	1943.6	1853.2	1708.6	1510.5	1283.4	1187.5	1208.7	1220.5	1222.9	1149.8
42.5°	2229.7	2204.5	2135.4	2023.0	1837.5	1685.8	1418.6	1406.8	1417.8	1409.2	1314.1
45°	2401.0	2381.3	2333.4	2291.0	2200.6	2124.3	1727.5	1648.1	1655.2	1625.3	1498.8
47.5°	2436.4	2414.4	2404.1	2463.1	2527.5	2546.4	2107.1	1934.9	1927.9	1861.8	1690.5
50°	2282.3	2284.7	2322.4	2490.6	2759.4	2929.1	2547.2	2258.7	2232.8	2085.8	1868.9
52.5°	1949.9	1987.6	2082.7	2355.4	2830.1	3207.3	2987.3	2602.2	2562.1	2303.5	2002.5
55°	1525.5	1574.2	1730.6	2044.2	2682.4	3331.5	3358.2	2959.0	2867.8	2467.0	2106.3
57.5°	1134.1	1149.0	1331.4	1617.4	2332.6	3209.7	3548.4	3234.1	3117.0	2597.5	2209.2
60°	706.5	716.0	908.5	1231.5	1766.8	2759.4	3548.4	3423.5	3311.9	2714.6	2303.5
62.5°	439.3	442.5	514.8	844.1	1200.9	2046.5	3401.5	3570.4	3480.8	2798.7	2384.5
65°	253.1	256.2	290.0	477.1	781.2	1225.3	3025.8	3613.7	3573.6	2865.5	2447.4
67.5°	184.7	186.3	199.6	268.0	510.8	629.5	2272.9	3440.0	3490.3	2898.5	2445.8
70°	160.3	162.7	180.0	209.1	368.6	386.7	1156.9	2970.8	3111.5	2851.3	2372.7
72.5°	123.4	126.5	152.5	196.5	270.4	278.2	418.9	2114.1	2327.1	2556.6	2172.3
75°	84.9	88.0	114.0	161.9	223.2	208.3	230.3	973.0	1227.6	1714.9	1653.6
77.5°	54.2	55.0	71.5	117.9	192.6	147.8	158.0	317.5	445.6	775.7	780.4
80°	36.2	36.9	44.0	76.2	132.0	136.8	97.5	147.0	161.1	226.3	157.2
82.5°	22.0	22.0	29.9	47.9	80.2	113.2	63.7	77.0	82.5	87.2	40.9
85°	8.6	8.6	18.1	31.4	50.3	52.7	40.1	44.8	47.2	51.1	18.9
87.5°	2.4	2.4	10.2	17.3	22.0	24.4	24.4	22.0	23.6	29.1	9.4
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°	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3	641.3
2.5°	638.2	635.8	632.7	629.5	626.4	624.0	621.7	621.7	620.1	617.7	616.2
5°	636.6	632.7	625.6	620.1	611.4	605.2	600.4	596.5	594.2	588.7	587.9
7.5°	634.2	629.5	619.3	608.3	594.2	583.2	572.2	564.3	556.4	550.1	548.6
10°	630.3	624.8	609.9	594.2	574.5	554.1	528.1	498.3	470.8	455.0	450.3
12.5°	630.3	623.2	603.6	582.4	554.1	503.8	437.8	371.7	320.7	297.9	291.6
15°	634.2	624.8	598.9	569.8	517.1	415.0	308.1	220.8	165.0	147.8	143.8
17.5°	638.2	624.8	591.8	552.5	449.5	301.0	175.3	116.3	98.2	94.3	94.3
20°	639.7	623.2	582.4	520.3	359.2	187.0	104.5	87.2	80.2	77.8	77.8
22.5°	646.0	624.0	575.3	473.9	260.9	110.0	82.5	73.1	66.0	63.7	63.7
25°	661.7	633.5	576.9	415.0	167.4	83.3	69.9	60.5	53.4	50.3	50.3
27.5°	686.9	654.7	585.5	346.6	105.3	71.5	58.9	48.7	43.2	40.1	40.1
30°	715.2	678.3	589.4	268.0	78.6	60.5	47.9	38.5	34.6	32.2	31.4
32.5°	764.7	719.1	586.3	183.9	64.4	51.1	38.5	30.7	27.5	26.7	26.7
35°	844.1	790.6	580.0	115.5	53.4	40.9	30.7	25.1	22.8	22.0	21.2
37.5°	951.8	895.2	561.1	76.2	44.0	32.2	25.1	21.2	18.9	18.1	18.1
40°	1083.0	1014.6	525.0	58.2	37.7	25.9	21.2	18.1	16.5	15.7	15.7
42.5°	1233.1	1147.4	467.6	50.3	31.4	22.0	18.1	14.9	14.1	13.4	13.4
45°	1397.4	1286.6	388.2	44.8	26.7	18.1	14.9	13.4	11.8	11.8	11.0
47.5°	1571.8	1426.4	298.7	39.3	22.8	15.7	13.4	11.0	10.2	9.4	9.4
50°	1740.0	1551.4	209.8	33.8	18.9	13.4	11.0	9.4	8.6	7.9	7.9
52.5°	1858.7	1626.9	148.5	29.1	15.7	11.8	8.6	7.1	6.3	6.3	6.3
55°	1953.8	1674.0	103.7	24.4	13.4	10.2	7.1	5.5	5.5	4.7	4.7
57.5°	2043.4	1704.7	76.2	20.4	11.0	7.9	5.5	3.9	3.9	3.1	3.1
60°	2136.1	1721.2	58.2	16.5	9.4	6.3	3.9	3.1	2.4	2.4	2.4
62.5°	2229.7	1731.4	44.8	13.4	7.9	4.7	3.1	2.4	1.6	0.8	0.8
65°	2311.4	1734.5	34.6	10.2	6.3	3.1	2.4	0.8	0.0	0.0	0.0
67.5°	2335.8	1698.4	26.7	7.9	4.7	2.4	1.6	0.0	0.0	0.0	0.0
70°	2269.7	1602.5	20.4	6.3	3.9	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	2014.3	1343.9	15.7	3.9	3.1	1.6	0.8	0.0	0.0	0.0	0.0
75°	1441.4	716.8	11.0	3.1	2.4	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	663.3	277.4	7.9	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0
80°	129.7	69.2	3.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.9	11.8	1.6	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.2	3.9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	1.6	0.8	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)