

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: P397781

Luminaire Tested: **ARCH-S-PA1-40-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397781  
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-PA1-40-750-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 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: 4164 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

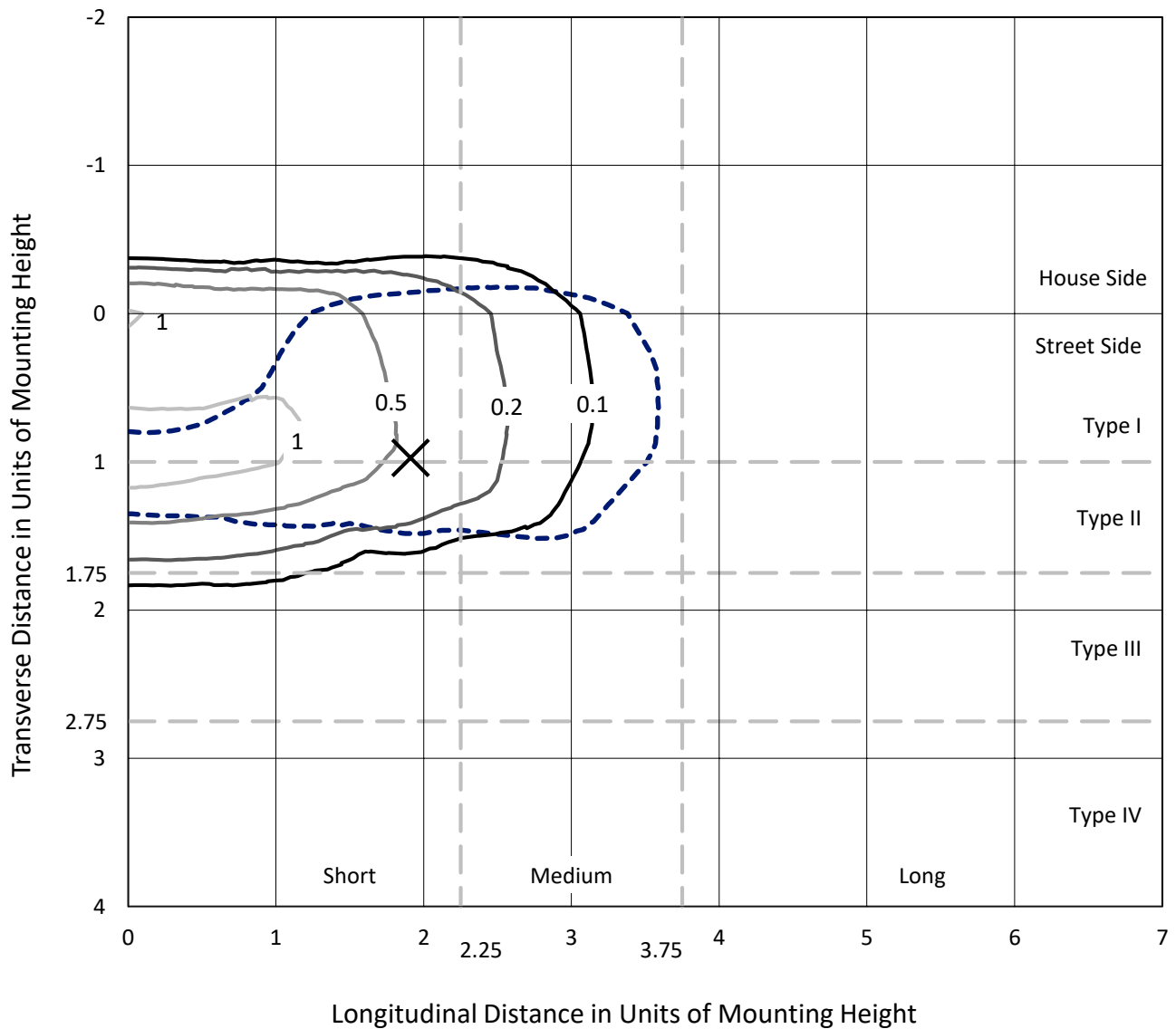
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

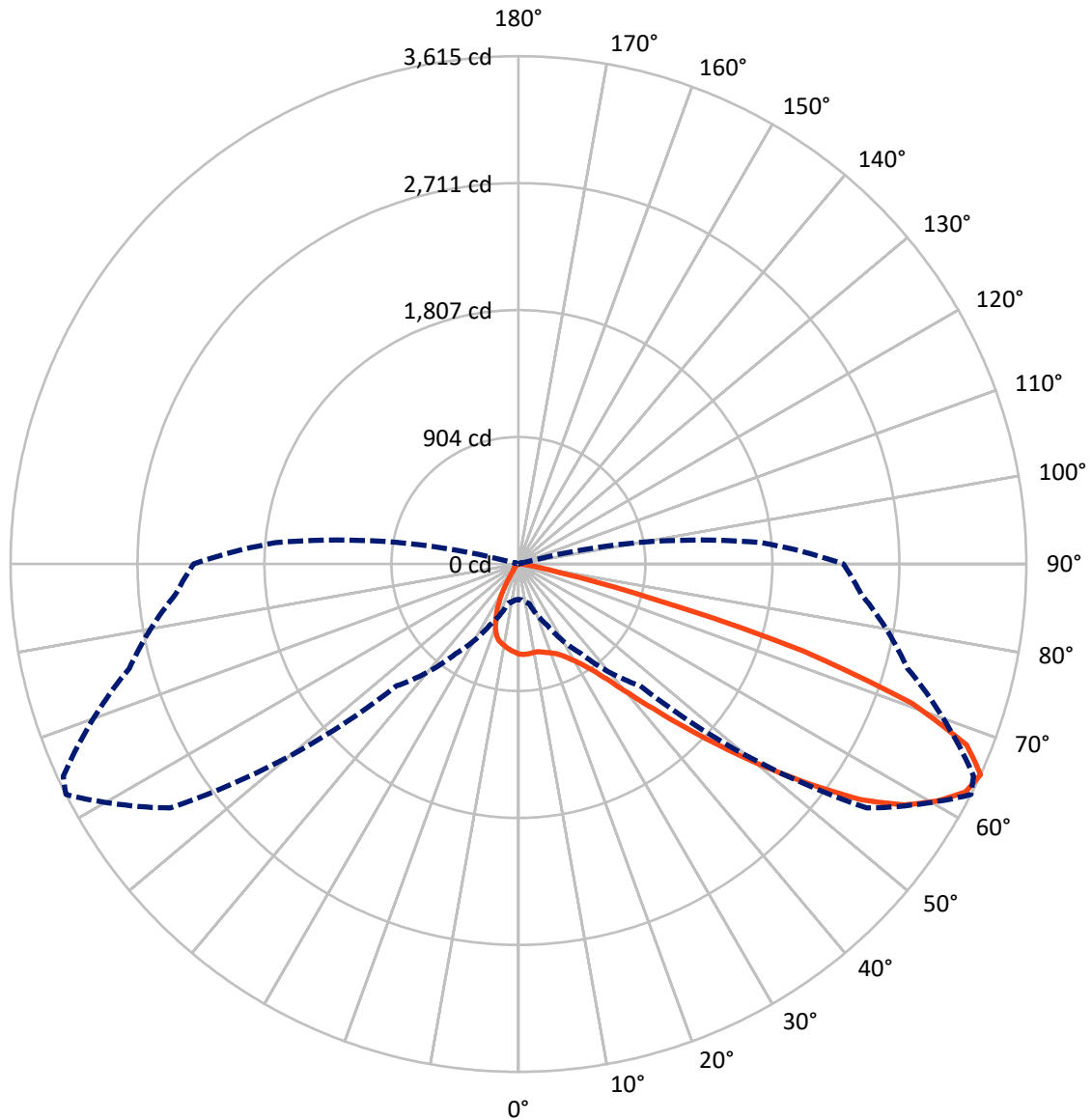
× Max cd  
 - - - 1/2 Max cd



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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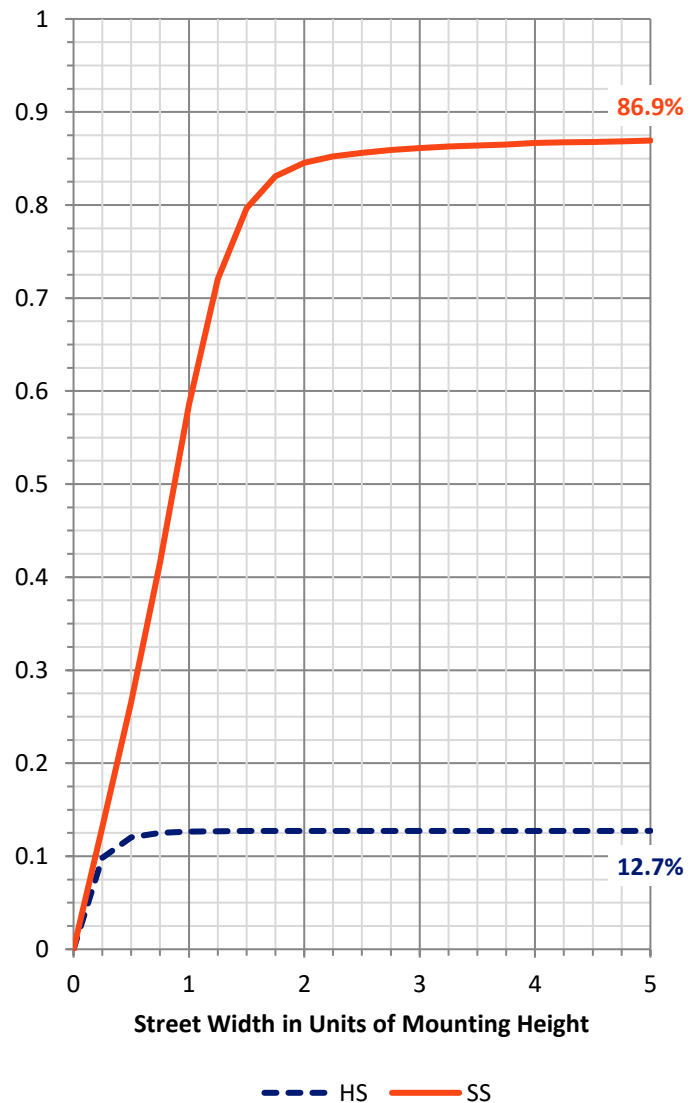
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	535.9	0.0	535.9
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	3628.1	0.0	3628.1
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	4164.0	0.0	4164.0
	% Fixture	100.0	0.0	100.0

**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°	397.4	9.5
40°-50°	841.8	20.2
50°-60°	1164.0	28.0
60°-70°	931.8	22.4
70°-80°	387.2	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°	4164.0	100.0
0°-180°	4164.0	100.0

**Coefficient of Utilization**



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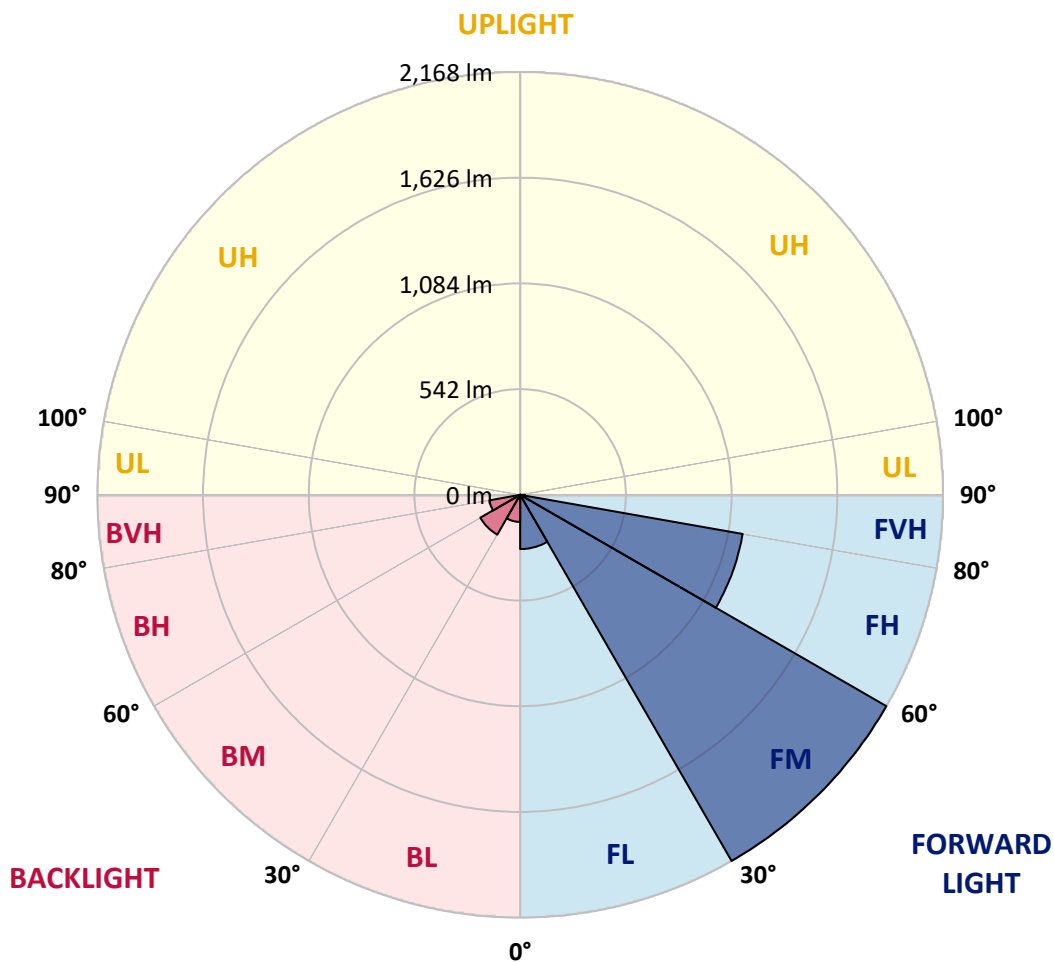
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	278.1	6.7			
FM	(30°-60°)	2167.8	52.1			
FH	(60°-80°)	1158.5	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°)	160.5	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°	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5
2.5°	652.5	650.9	649.3	648.5	648.5	647.8	644.6	643.8	642.3	640.7	639.1
5°	646.2	643.8	643.0	643.8	644.6	646.2	644.6	644.6	643.0	641.5	638.3
7.5°	630.5	628.9	629.7	632.0	632.8	638.3	639.1	641.5	641.5	639.9	637.5
10°	611.6	610.8	610.8	614.7	618.7	626.5	632.0	638.3	639.1	639.1	635.2
12.5°	597.4	596.7	599.0	603.7	611.6	621.8	631.2	640.7	642.3	643.0	636.7
15°	588.8	588.8	591.9	601.4	612.4	626.5	637.5	650.1	651.7	650.9	642.3
17.5°	580.9	581.7	588.0	603.7	616.3	635.2	648.5	662.7	663.5	662.7	648.5
20°	577.8	579.4	588.8	609.2	623.4	644.6	661.9	676.1	676.8	673.7	654.8
22.5°	586.4	587.2	599.0	621.0	634.4	658.0	680.0	693.3	694.1	689.4	664.3
25°	616.3	616.3	626.5	645.4	657.2	680.8	704.4	720.1	720.1	714.6	685.5
27.5°	686.3	680.0	677.6	683.1	687.1	712.2	737.4	757.0	756.2	748.4	713.0
30°	821.5	805.8	780.6	752.3	738.2	755.5	779.0	804.2	803.4	790.8	746.8
32.5°	1048.7	1025.9	966.1	891.4	830.9	811.3	833.3	860.8	861.6	846.6	801.0
35°	1367.0	1330.9	1224.0	1120.2	981.9	907.2	913.5	943.3	952.8	944.9	892.2
37.5°	1673.6	1640.6	1538.4	1394.6	1206.7	1054.2	1027.4	1053.4	1064.4	1064.4	1008.6
40°	1982.6	1944.1	1853.6	1709.0	1510.9	1283.7	1187.8	1209.0	1220.8	1223.2	1150.1
42.5°	2230.2	2205.0	2135.9	2023.4	1837.9	1686.2	1418.9	1407.1	1418.1	1409.5	1314.4
45°	2401.6	2381.9	2334.0	2291.5	2201.1	2124.9	1727.9	1648.5	1655.5	1625.7	1499.1
47.5°	2436.9	2414.9	2404.7	2463.7	2528.1	2547.0	2107.6	1935.4	1928.3	1862.3	1690.9
50°	2282.9	2285.2	2323.0	2491.2	2760.0	2929.8	2547.8	2259.3	2233.3	2086.3	1869.4
52.5°	1950.3	1988.1	2083.2	2356.0	2830.8	3208.1	2988.0	2602.8	2562.7	2304.1	2003.0
55°	1525.8	1574.6	1731.0	2044.7	2683.0	3332.3	3359.1	2959.7	2868.5	2467.6	2106.8
57.5°	1134.4	1149.3	1331.7	1617.8	2333.2	3210.5	3549.3	3234.8	3117.7	2598.1	2209.8
60°	706.7	716.1	908.7	1231.8	1767.2	2760.0	3549.3	3424.3	3312.7	2715.2	2304.1
62.5°	439.4	442.6	514.9	844.3	1201.2	2047.0	3402.3	3571.3	3481.7	2799.3	2385.1
65°	253.1	256.3	290.1	477.2	781.4	1225.5	3026.5	3614.5	3574.4	2866.2	2447.9
67.5°	184.7	186.3	199.7	268.1	511.0	629.7	2273.4	3440.8	3491.1	2899.2	2446.4
70°	160.4	162.7	180.0	209.1	368.7	386.8	1157.2	2971.5	3112.2	2852.0	2373.3
72.5°	123.4	126.6	152.5	196.5	270.4	278.3	419.0	2114.6	2327.7	2557.2	2172.8
75°	84.9	88.0	114.0	161.9	223.3	208.3	230.3	973.2	1227.9	1715.3	1654.0
77.5°	54.2	55.0	71.5	117.9	192.6	147.8	158.0	317.6	445.7	775.9	780.6
80°	36.2	36.9	44.0	76.3	132.1	136.8	97.5	147.0	161.2	226.4	157.2
82.5°	22.0	22.0	29.9	48.0	80.2	113.2	63.7	77.0	82.5	87.3	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°	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5	641.5
2.5°	638.3	636.0	632.8	629.7	626.5	624.2	621.8	621.8	620.2	617.9	616.3
5°	636.7	632.8	625.7	620.2	611.6	605.3	600.6	596.7	594.3	588.8	588.0
7.5°	634.4	629.7	619.5	608.4	594.3	583.3	572.3	564.4	556.6	550.3	548.7
10°	630.5	625.0	610.0	594.3	574.6	554.2	528.3	498.4	470.9	455.2	450.4
12.5°	630.5	623.4	603.7	582.5	554.2	503.9	437.9	371.8	320.7	297.9	291.6
15°	634.4	625.0	599.0	569.9	517.3	415.1	308.2	220.9	165.1	147.8	143.9
17.5°	638.3	625.0	591.9	552.6	449.7	301.1	175.3	116.3	98.3	94.3	94.3
20°	639.9	623.4	582.5	520.4	359.3	187.1	104.6	87.3	80.2	77.8	77.8
22.5°	646.2	624.2	575.4	474.0	261.0	110.1	82.5	73.1	66.0	63.7	63.7
25°	661.9	633.6	577.0	415.1	167.4	83.3	70.0	60.5	53.5	50.3	50.3
27.5°	687.1	654.8	585.7	346.7	105.3	71.5	59.0	48.7	43.2	40.1	40.1
30°	715.4	678.4	589.6	268.1	78.6	60.5	48.0	38.5	34.6	32.2	31.4
32.5°	764.9	719.3	586.4	183.9	64.5	51.1	38.5	30.7	27.5	26.7	26.7
35°	844.3	790.8	580.1	115.6	53.5	40.9	30.7	25.2	22.8	22.0	21.2
37.5°	952.0	895.4	561.3	76.3	44.0	32.2	25.2	21.2	18.9	18.1	18.1
40°	1083.3	1014.9	525.1	58.2	37.7	25.9	21.2	18.1	16.5	15.7	15.7
42.5°	1233.4	1147.7	467.7	50.3	31.4	22.0	18.1	14.9	14.1	13.4	13.4
45°	1397.7	1286.9	388.3	44.8	26.7	18.1	14.9	13.4	11.8	11.8	11.0
47.5°	1572.2	1426.8	298.7	39.3	22.8	15.7	13.4	11.0	10.2	9.4	9.4
50°	1740.4	1551.8	209.9	33.8	18.9	13.4	11.0	9.4	8.6	7.9	7.9
52.5°	1859.2	1627.2	148.6	29.1	15.7	11.8	8.6	7.1	6.3	6.3	6.3
55°	1954.3	1674.4	103.8	24.4	13.4	10.2	7.1	5.5	5.5	4.7	4.7
57.5°	2043.9	1705.1	76.3	20.4	11.0	7.9	5.5	3.9	3.9	3.1	3.1
60°	2136.6	1721.6	58.2	16.5	9.4	6.3	3.9	3.1	2.4	2.4	2.4
62.5°	2230.2	1731.8	44.8	13.4	7.9	4.7	3.1	2.4	1.6	0.8	0.8
65°	2312.0	1734.9	34.6	10.2	6.3	3.1	2.4	0.8	0.0	0.0	0.0
67.5°	2336.3	1698.8	26.7	7.9	4.7	2.4	1.6	0.0	0.0	0.0	0.0
70°	2270.3	1602.9	20.4	6.3	3.9	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	2014.8	1344.2	15.7	3.9	3.1	1.6	0.8	0.0	0.0	0.0	0.0
75°	1441.7	716.9	11.0	3.1	2.4	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	663.5	277.5	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)