

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: P397835

Luminaire Tested: **ARCH-S-PA1-50-730-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397835
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-PA1-50-730-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA 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: 4888 lumens
Efficiency: N/A
Efficacy: 90.5 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

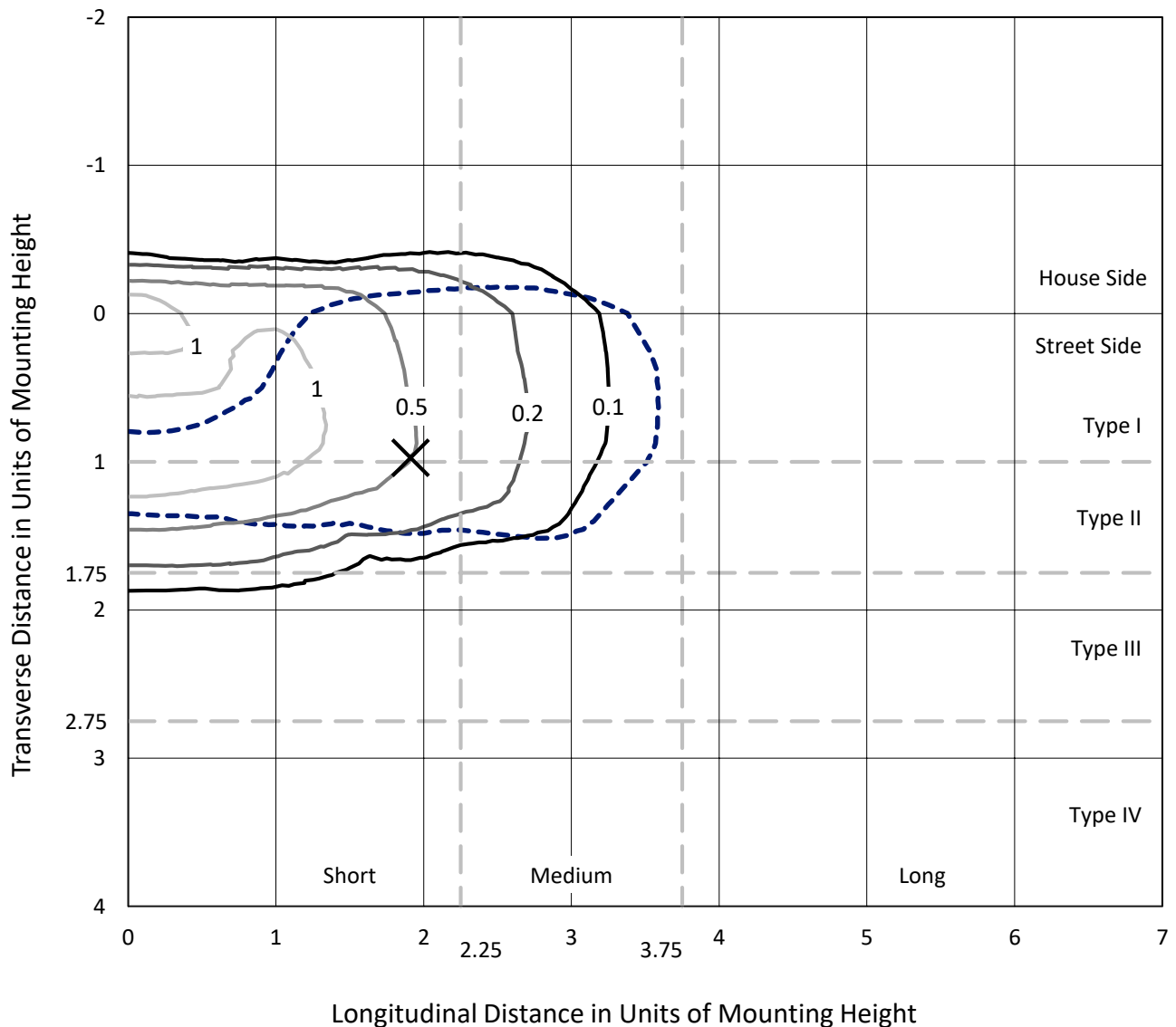
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

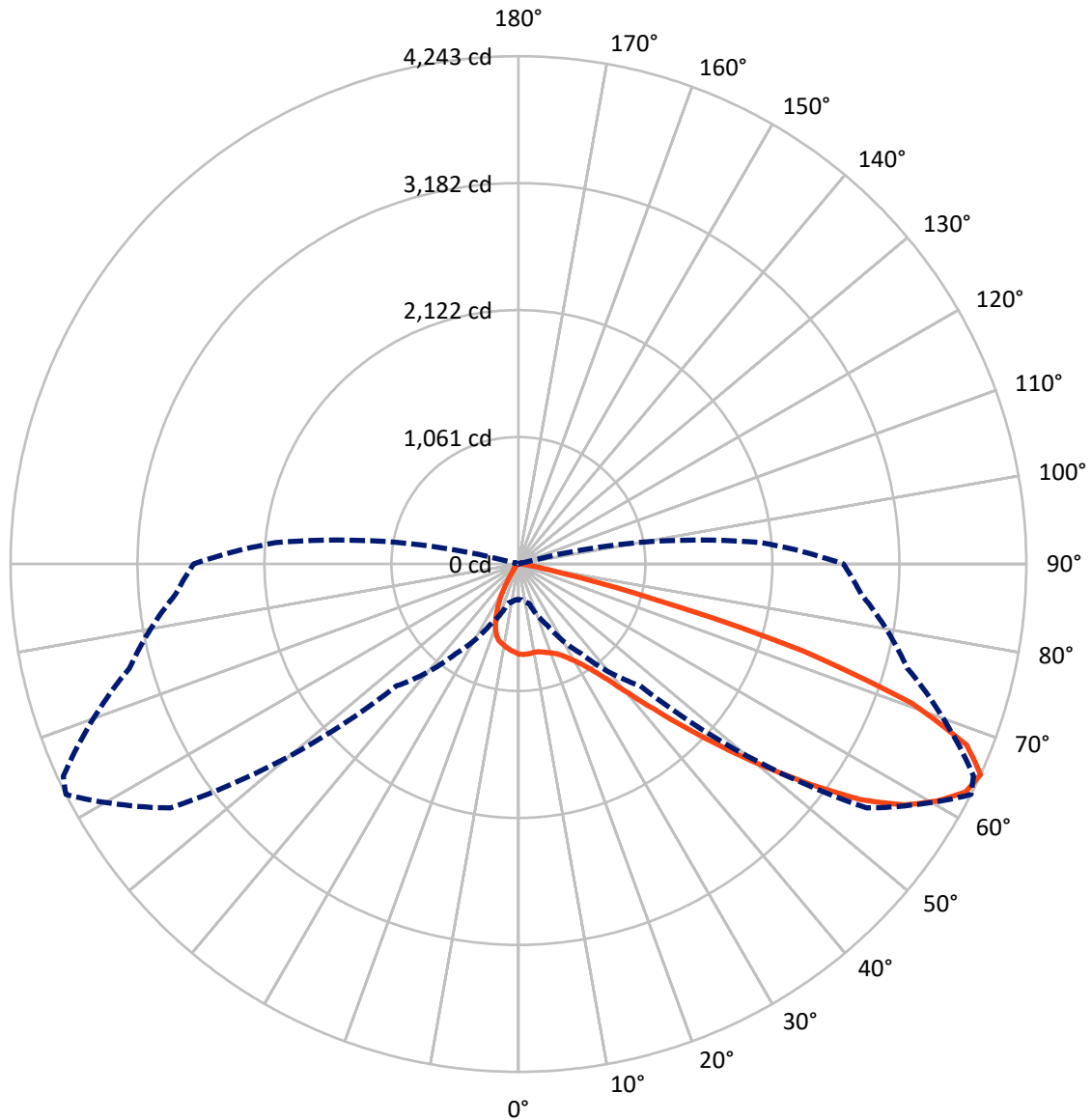
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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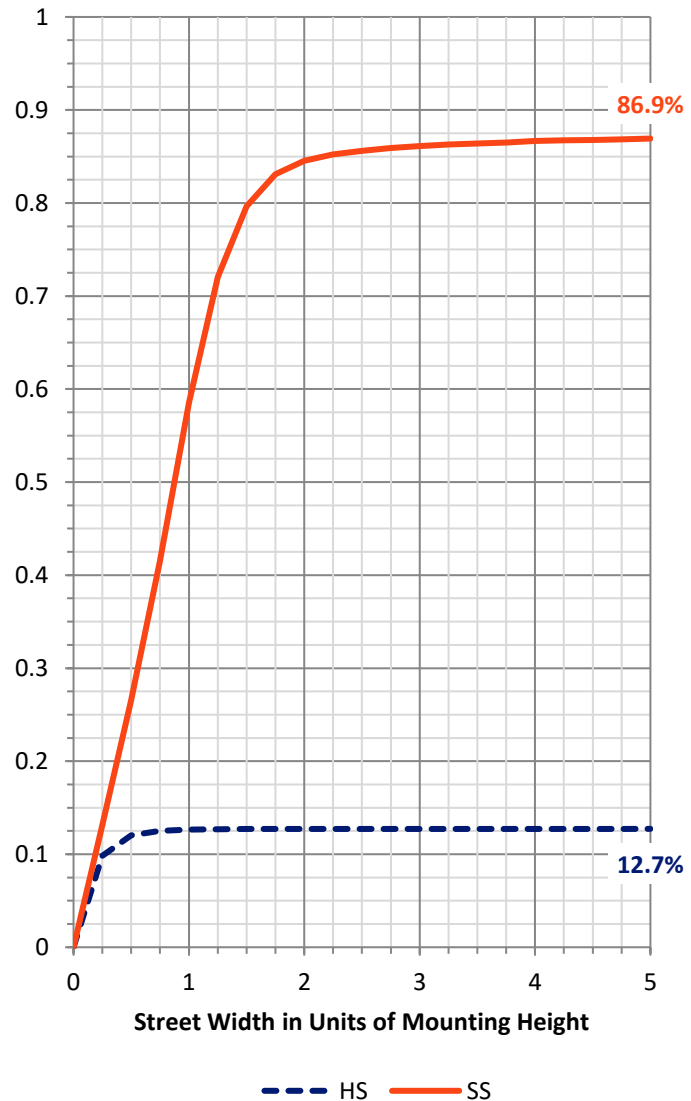
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	629.1	0.0	629.1
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	4258.9	0.0	4258.9
	% Fixture	87.1	0.0	87.1
Total	Lumens	4888.0	0.0	4888.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	1.4
10°-20°	169.5	3.5
20°-30°	251.2	5.1
30°-40°	466.5	9.5
40°-50°	988.2	20.2
50°-60°	1366.4	28.0
60°-70°	1093.9	22.4
70°-80°	454.5	9.3
80°-90°	29.2	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°	4888.0	100.0
0°-180°	4888.0	100.0



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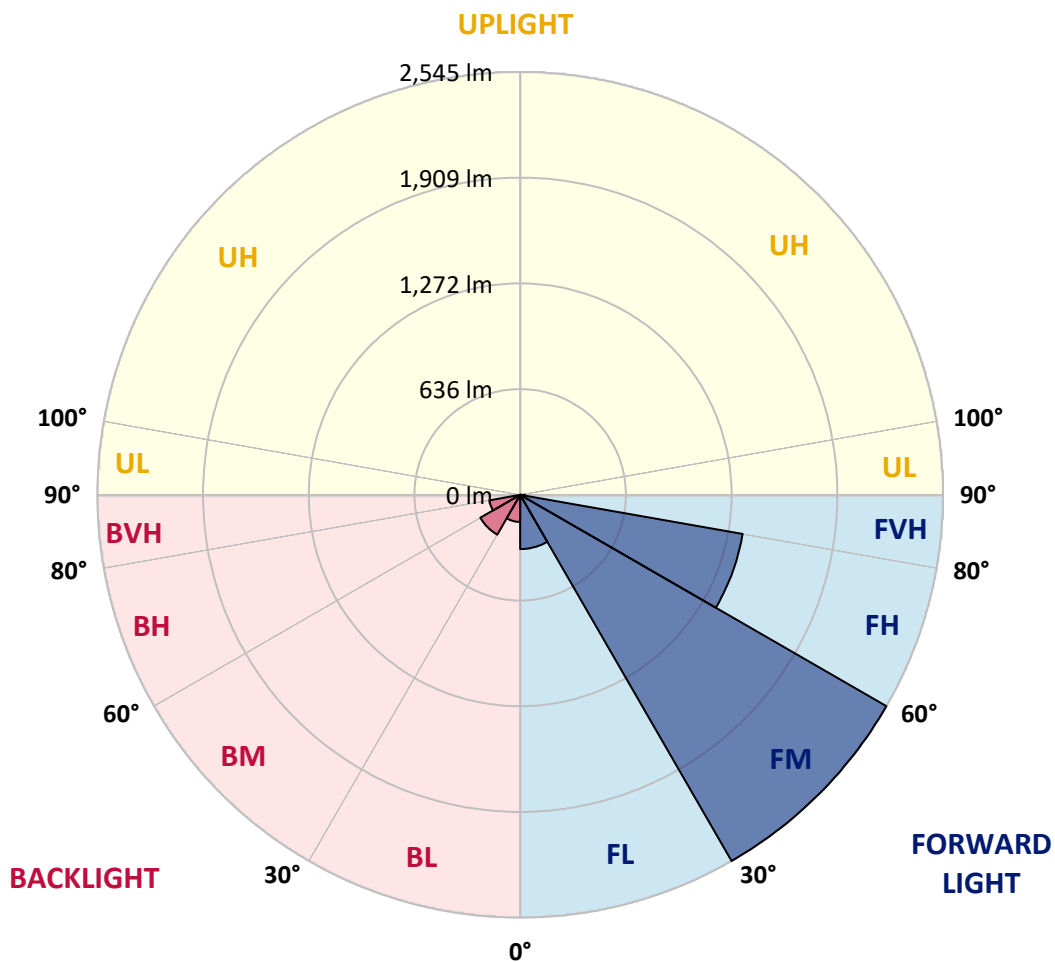
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	326.4	6.7			
FM	(30°-60°)	2544.7	52.1			
FH	(60°-80°)	1360.0	27.8			G1/1800
FVH	(80°-90°)	27.9	0.6			G1/100
BL	(0°-30°)	163.0	3.3	B1/500		
BM	(30°-60°)	276.3	5.7	B1/1000		
BH	(60°-80°)	188.4	3.9	B1/500		G1/500
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: 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°	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0
2.5°	765.9	764.1	762.2	761.3	761.3	760.4	756.7	755.8	753.9	752.1	750.2
5°	758.5	755.8	754.8	755.8	756.7	758.5	756.7	756.7	754.8	753.0	749.3
7.5°	740.1	738.2	739.2	741.9	742.8	749.3	750.2	753.0	753.0	751.2	748.4
10°	717.9	717.0	717.0	721.6	726.2	735.5	741.9	749.3	750.2	750.2	745.6
12.5°	701.3	700.4	703.2	708.7	717.9	729.9	741.0	752.1	753.9	754.8	747.5
15°	691.2	691.2	694.9	705.9	718.9	735.5	748.4	763.1	765.0	764.1	753.9
17.5°	681.9	682.9	690.2	708.7	723.5	745.6	761.3	777.9	778.8	777.9	761.3
20°	678.3	680.1	691.2	715.2	731.8	756.7	777.0	793.6	794.5	790.8	768.7
22.5°	688.4	689.3	703.2	729.0	744.7	772.4	798.2	813.9	814.8	809.3	779.8
25°	723.5	723.5	735.5	757.6	771.5	799.1	826.8	845.3	845.3	838.8	804.7
27.5°	805.6	798.2	795.4	801.9	806.5	836.1	865.6	888.6	887.7	878.5	837.0
30°	964.3	945.9	916.3	883.1	866.5	886.8	914.5	944.0	943.1	928.3	876.7
32.5°	1231.0	1204.2	1134.1	1046.4	975.4	952.3	978.2	1010.5	1011.4	993.8	940.3
35°	1604.7	1562.3	1436.8	1315.0	1152.6	1064.9	1072.3	1107.4	1118.4	1109.2	1047.4
37.5°	1964.6	1925.9	1805.9	1637.0	1416.5	1237.5	1206.1	1236.5	1249.5	1249.5	1183.9
40°	2327.3	2282.1	2175.9	2006.2	1773.6	1506.9	1394.3	1419.3	1433.1	1435.9	1350.0
42.5°	2618.0	2588.4	2507.2	2375.3	2157.5	1979.4	1665.6	1651.8	1664.7	1654.6	1542.9
45°	2819.1	2796.1	2739.8	2689.9	2583.8	2494.3	2028.3	1935.1	1943.4	1908.3	1759.8
47.5°	2860.7	2834.8	2822.8	2892.0	2967.7	2989.8	2474.0	2271.9	2263.6	2186.1	1984.9
50°	2679.8	2682.6	2726.9	2924.3	3239.9	3439.2	2990.8	2652.1	2621.7	2449.1	2194.4
52.5°	2289.4	2333.7	2445.4	2765.6	3323.0	3765.9	3507.5	3055.4	3008.3	2704.7	2351.3
55°	1791.1	1848.4	2032.0	2400.2	3149.5	3911.7	3943.1	3474.3	3367.3	2896.6	2473.1
57.5°	1331.6	1349.1	1563.2	1899.1	2738.8	3768.7	4166.4	3797.3	3659.8	3049.8	2594.0
60°	829.6	840.7	1066.7	1446.0	2074.4	3239.9	4166.4	4019.7	3888.6	3187.3	2704.7
62.5°	515.8	519.5	604.4	991.1	1410.0	2403.0	3993.8	4192.2	4087.0	3286.1	2799.8
65°	297.1	300.8	340.5	560.1	917.3	1438.6	3552.8	4243.0	4195.9	3364.5	2873.6
67.5°	216.9	218.7	234.4	314.7	599.8	739.2	2668.7	4039.1	4098.1	3403.3	2871.7
70°	188.2	191.0	211.3	245.5	432.8	454.0	1358.4	3488.2	3653.3	3347.9	2785.9
72.5°	144.9	148.6	179.0	230.7	317.4	326.7	491.8	2482.3	2732.4	3001.8	2550.6
75°	99.7	103.4	133.8	190.1	262.1	244.5	270.4	1142.4	1441.4	2013.5	1941.6
77.5°	63.7	64.6	84.0	138.4	226.1	173.5	185.5	372.8	523.2	910.8	916.3
80°	42.4	43.4	51.7	89.5	155.0	160.6	114.4	172.6	189.2	265.8	184.6
82.5°	25.8	25.8	35.1	56.3	94.1	132.9	74.7	90.4	96.9	102.4	48.0
85°	10.2	10.2	21.2	36.9	59.1	61.8	47.1	52.6	55.4	60.0	22.1
87.5°	2.8	2.8	12.0	20.3	25.8	28.6	28.6	25.8	27.7	34.1	11.1
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°	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0
2.5°	749.3	746.5	742.8	739.2	735.5	732.7	729.9	729.9	728.1	725.3	723.5
5°	747.5	742.8	734.5	728.1	717.9	710.6	705.0	700.4	697.6	691.2	690.2
7.5°	744.7	739.2	727.2	714.2	697.6	684.7	671.8	662.6	653.3	646.0	644.1
10°	740.1	733.6	716.1	697.6	674.6	650.6	620.1	585.1	552.8	534.3	528.8
12.5°	740.1	731.8	708.7	683.8	650.6	591.5	514.0	436.5	376.5	349.7	342.4
15°	744.7	733.6	703.2	669.0	607.2	487.2	361.7	259.3	193.8	173.5	168.9
17.5°	749.3	733.6	694.9	648.7	527.8	353.4	205.8	136.6	115.3	110.7	110.7
20°	751.2	731.8	683.8	610.9	421.7	219.6	122.7	102.4	94.1	91.4	91.4
22.5°	758.5	732.7	675.5	556.4	306.4	129.2	96.9	85.8	77.5	74.7	74.7
25°	777.0	743.8	677.3	487.2	196.6	97.8	82.1	71.1	62.7	59.1	59.1
27.5°	806.5	768.7	687.5	407.0	123.7	84.0	69.2	57.2	50.8	47.1	47.1
30°	839.7	796.4	692.1	314.7	92.3	71.1	56.3	45.2	40.6	37.8	36.9
32.5°	897.9	844.4	688.4	215.9	75.7	60.0	45.2	36.0	32.3	31.4	31.4
35°	991.1	928.3	681.0	135.7	62.7	48.0	36.0	29.5	26.8	25.8	24.9
37.5°	1117.5	1051.1	658.9	89.5	51.7	37.8	29.5	24.9	22.1	21.2	21.2
40°	1271.6	1191.3	616.4	68.3	44.3	30.5	24.9	21.2	19.4	18.5	18.5
42.5°	1447.9	1347.3	549.1	59.1	36.9	25.8	21.2	17.5	16.6	15.7	15.7
45°	1640.7	1510.6	455.9	52.6	31.4	21.2	17.5	15.7	13.8	13.8	12.9
47.5°	1845.6	1674.9	350.7	46.1	26.8	18.5	15.7	12.9	12.0	11.1	11.1
50°	2043.1	1821.6	246.4	39.7	22.1	15.7	12.9	11.1	10.2	9.2	9.2
52.5°	2182.4	1910.2	174.4	34.1	18.5	13.8	10.2	8.3	7.4	7.4	7.4
55°	2294.1	1965.5	121.8	28.6	15.7	12.0	8.3	6.5	6.5	5.5	5.5
57.5°	2399.3	2001.5	89.5	24.0	12.9	9.2	6.5	4.6	4.6	3.7	3.7
60°	2508.2	2020.9	68.3	19.4	11.1	7.4	4.6	3.7	2.8	2.8	2.8
62.5°	2618.0	2032.9	52.6	15.7	9.2	5.5	3.7	2.8	1.8	0.9	0.9
65°	2713.9	2036.6	40.6	12.0	7.4	3.7	2.8	0.9	0.0	0.0	0.0
67.5°	2742.5	1994.2	31.4	9.2	5.5	2.8	1.8	0.0	0.0	0.0	0.0
70°	2665.0	1881.6	24.0	7.4	4.6	1.8	0.9	0.0	0.0	0.0	0.0
72.5°	2365.1	1578.0	18.5	4.6	3.7	1.8	0.9	0.0	0.0	0.0	0.0
75°	1692.4	841.6	12.9	3.7	2.8	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	778.8	325.7	9.2	2.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0
80°	152.3	81.2	3.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.1	13.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.0	4.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	1.8	0.9	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)