

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: P397853

Luminaire Tested: **ARCH-S-PA1-50-750-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397853
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-PA1-50-750-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 5369 lumens
Efficiency: N/A
Efficacy: 99.4 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

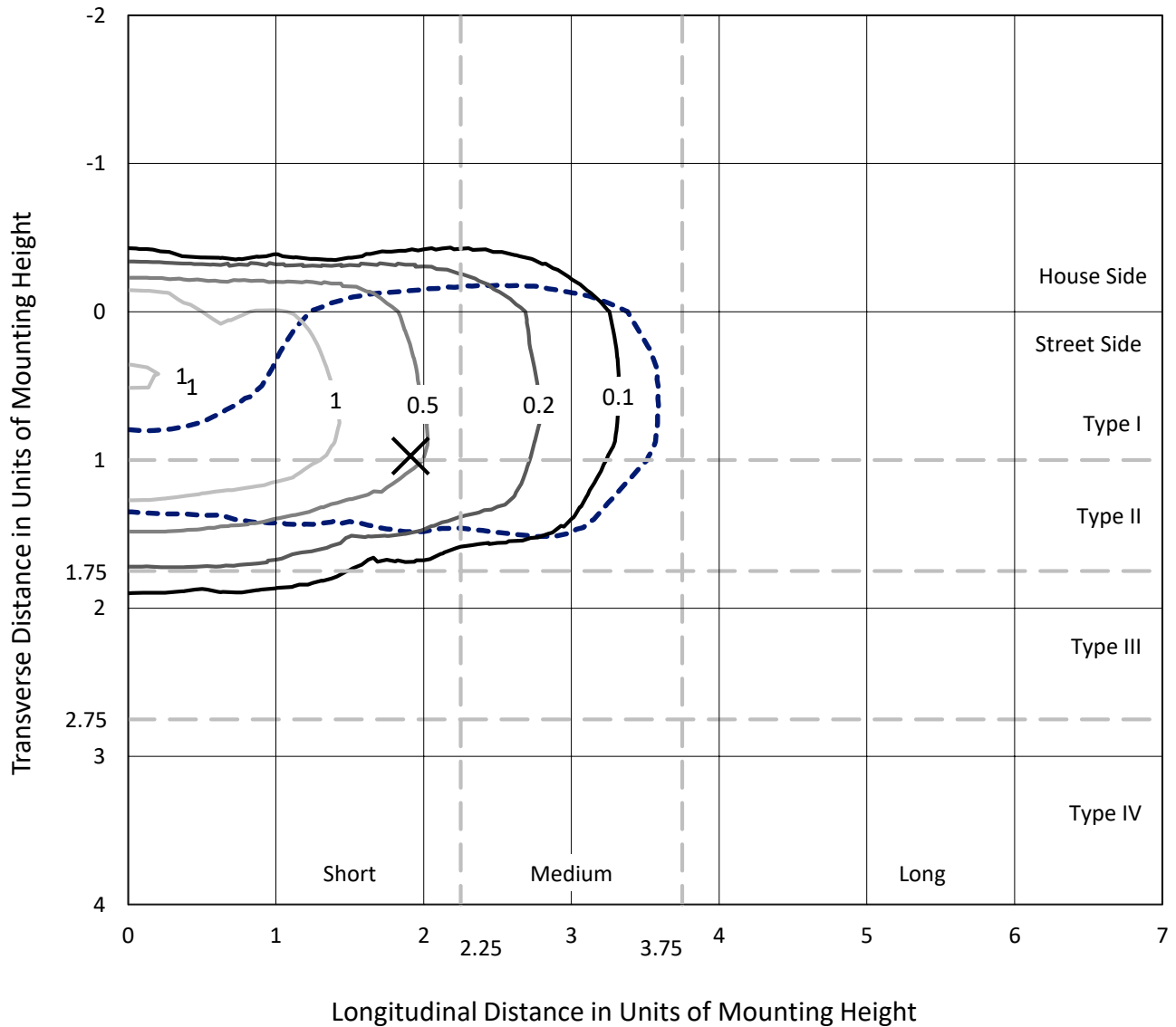
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

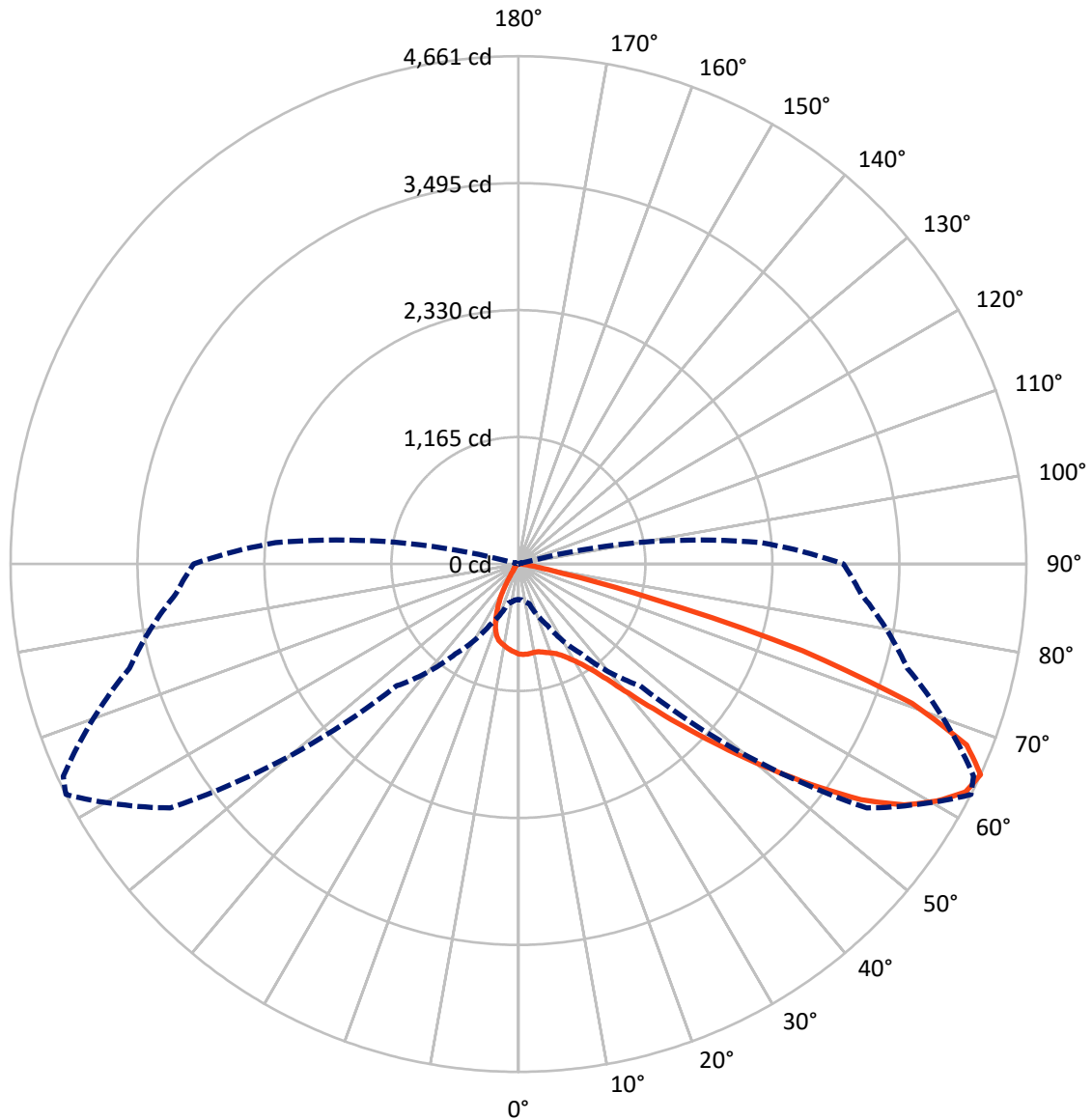
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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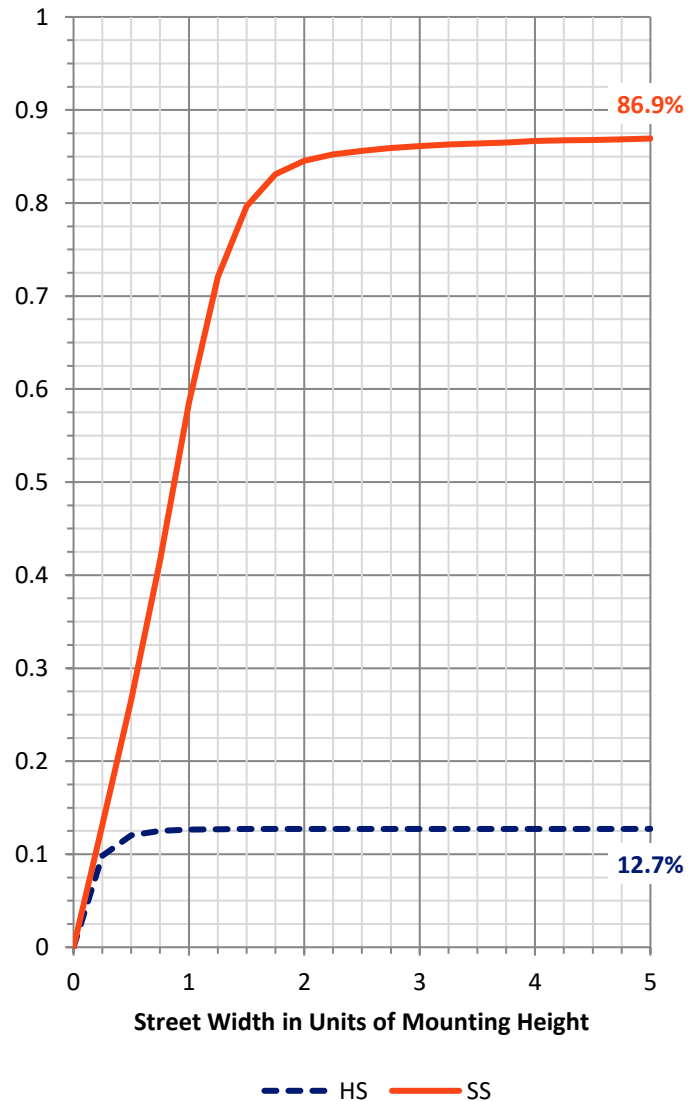
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	691.0	0.0	691.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	4678.0	0.0	4678.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	5369.0	0.0	5369.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	1.4
10°-20°	186.2	3.5
20°-30°	276.0	5.1
30°-40°	512.4	9.5
40°-50°	1085.4	20.2
50°-60°	1500.9	28.0
60°-70°	1201.5	22.4
70°-80°	499.2	9.3
80°-90°	32.1	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°	5369.0	100.0
0°-180°	5369.0	100.0



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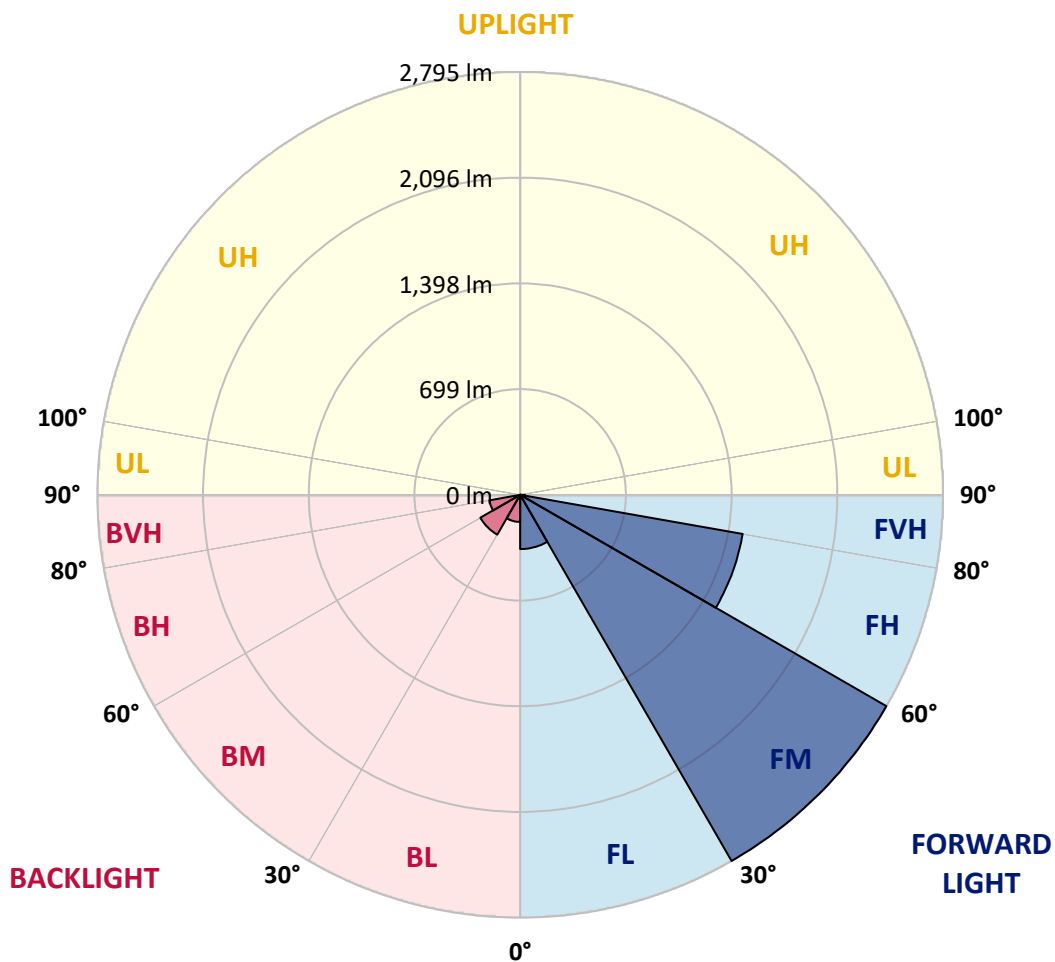
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	358.5	6.7			
FM	(30°-60°)	2795.1	52.1			
FH	(60°-80°)	1493.8	27.8			G1/1800
FVH	(80°-90°)	30.6	0.6			G1/100
BL	(0°-30°)	179.1	3.3	B1/500		
BM	(30°-60°)	303.5	5.7	B1/1000		
BH	(60°-80°)	206.9	3.9	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1
2.5°	841.3	839.3	837.2	836.2	836.2	835.2	831.2	830.1	828.1	826.1	824.1
5°	833.2	830.1	829.1	830.1	831.2	833.2	831.2	831.2	829.1	827.1	823.0
7.5°	812.9	810.9	811.9	814.9	815.9	823.0	824.1	827.1	827.1	825.1	822.0
10°	788.6	787.6	787.6	792.6	797.7	807.8	814.9	823.0	824.1	824.1	819.0
12.5°	770.3	769.3	772.4	778.4	788.6	801.8	813.9	826.1	828.1	829.1	821.0
15°	759.2	759.2	763.2	775.4	789.6	807.8	822.0	838.2	840.3	839.3	828.1
17.5°	749.1	750.1	758.2	778.4	794.7	819.0	836.2	854.5	855.5	854.5	836.2
20°	745.0	747.0	759.2	785.5	803.8	831.2	853.5	871.7	872.7	868.7	844.3
22.5°	756.1	757.2	772.4	800.7	818.0	848.4	876.8	894.0	895.0	888.9	856.5
25°	794.7	794.7	807.8	832.2	847.4	877.8	908.2	928.5	928.5	921.4	883.9
27.5°	884.9	876.8	873.7	880.8	885.9	918.3	950.8	976.1	975.1	964.9	919.3
30°	1059.2	1038.9	1006.5	970.0	951.8	974.1	1004.5	1036.9	1035.9	1019.7	962.9
32.5°	1352.1	1322.7	1245.7	1149.4	1071.4	1046.0	1074.4	1109.9	1110.9	1091.6	1032.9
35°	1762.6	1716.0	1578.2	1444.4	1266.0	1169.7	1177.8	1216.3	1228.5	1218.3	1150.4
37.5°	2158.0	2115.4	1983.6	1798.1	1555.9	1359.2	1324.8	1358.2	1372.4	1372.4	1300.4
40°	2556.3	2506.6	2390.1	2203.6	1948.1	1655.2	1531.5	1558.9	1574.1	1577.2	1482.9
42.5°	2875.6	2843.1	2754.0	2609.0	2369.8	2174.2	1829.5	1814.3	1828.5	1817.4	1694.7
45°	3096.5	3071.2	3009.4	2954.6	2838.1	2739.8	2227.9	2125.5	2134.6	2096.1	1932.9
47.5°	3142.2	3113.8	3100.6	3176.6	3259.7	3284.1	2717.5	2495.5	2486.4	2401.2	2180.3
50°	2943.5	2946.5	2995.2	3212.1	3558.7	3777.7	3285.1	2913.1	2879.6	2690.1	2410.3
52.5°	2514.7	2563.4	2686.0	3037.8	3650.0	4136.5	3852.7	3356.0	3304.3	2970.9	2582.7
55°	1967.4	2030.2	2231.9	2636.4	3459.4	4296.6	4331.1	3816.2	3698.6	3181.7	2716.4
57.5°	1462.6	1481.9	1717.0	2086.0	3008.4	4139.5	4576.4	4171.0	4019.9	3349.9	2849.2
60°	911.2	923.4	1171.7	1588.3	2278.6	3558.7	4576.4	4415.2	4271.3	3501.0	2970.9
62.5°	566.6	570.7	663.9	1088.6	1548.8	2639.4	4386.9	4604.8	4489.2	3609.4	3075.3
65°	326.4	330.4	374.0	615.3	1007.5	1580.2	3902.4	4660.5	4608.8	3695.6	3156.3
67.5°	238.2	240.2	257.5	345.6	658.8	811.9	2931.3	4436.5	4501.4	3738.2	3154.3
70°	206.8	209.8	232.1	269.6	475.4	498.7	1492.0	3831.4	4012.8	3677.3	3060.1
72.5°	159.1	163.2	196.6	253.4	348.7	358.8	540.2	2726.6	3001.3	3297.2	2801.6
75°	109.5	113.5	147.0	208.8	287.9	268.6	297.0	1254.8	1583.2	2211.7	2132.6
77.5°	69.9	71.0	92.2	152.0	248.3	190.6	203.7	409.5	574.7	1000.4	1006.5
80°	46.6	47.6	56.8	98.3	170.3	176.4	125.7	189.5	207.8	291.9	202.7
82.5°	28.4	28.4	38.5	61.8	103.4	146.0	82.1	99.3	106.4	112.5	52.7
85°	11.1	11.1	23.3	40.5	64.9	67.9	51.7	57.8	60.8	65.9	24.3
87.5°	3.0	3.0	13.2	22.3	28.4	31.4	31.4	28.4	30.4	37.5	12.2
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°	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1
2.5°	823.0	820.0	815.9	811.9	807.8	804.8	801.8	801.8	799.7	796.7	794.7
5°	821.0	815.9	806.8	799.7	788.6	780.5	774.4	769.3	766.3	759.2	758.2
7.5°	818.0	811.9	798.7	784.5	766.3	752.1	737.9	727.8	717.6	709.5	707.5
10°	812.9	805.8	786.6	766.3	740.9	714.6	681.1	642.6	607.1	586.9	580.8
12.5°	812.9	803.8	778.4	751.1	714.6	649.7	564.6	479.4	413.5	384.2	376.0
15°	818.0	805.8	772.4	734.9	666.9	535.2	397.3	284.8	212.9	190.6	185.5
17.5°	823.0	805.8	763.2	712.6	579.8	388.2	226.0	150.0	126.7	121.6	121.6
20°	825.1	803.8	751.1	671.0	463.2	241.2	134.8	112.5	103.4	100.3	100.3
22.5°	833.2	804.8	742.0	611.2	336.5	141.9	106.4	94.3	85.1	82.1	82.1
25°	853.5	817.0	744.0	535.2	215.9	107.4	90.2	78.0	68.9	64.9	64.9
27.5°	885.9	844.3	755.1	447.0	135.8	92.2	76.0	62.8	55.7	51.7	51.7
30°	922.4	874.7	760.2	345.6	101.4	78.0	61.8	49.7	44.6	41.6	40.5
32.5°	986.2	927.4	756.1	237.2	83.1	65.9	49.7	39.5	35.5	34.5	34.5
35°	1088.6	1019.7	748.0	149.0	68.9	52.7	39.5	32.4	29.4	28.4	27.4
37.5°	1227.5	1154.5	723.7	98.3	56.8	41.6	32.4	27.4	24.3	23.3	23.3
40°	1396.7	1308.6	677.1	75.0	48.7	33.4	27.4	23.3	21.3	20.3	20.3
42.5°	1590.3	1479.9	603.1	64.9	40.5	28.4	23.3	19.3	18.2	17.2	17.2
45°	1802.2	1659.3	500.7	57.8	34.5	23.3	19.3	17.2	15.2	15.2	14.2
47.5°	2027.2	1839.7	385.2	50.7	29.4	20.3	17.2	14.2	13.2	12.2	12.2
50°	2244.1	2000.8	270.6	43.6	24.3	17.2	14.2	12.2	11.1	10.1	10.1
52.5°	2397.2	2098.2	191.6	37.5	20.3	15.2	11.1	9.1	8.1	8.1	8.1
55°	2519.8	2159.0	133.8	31.4	17.2	13.2	9.1	7.1	7.1	6.1	6.1
57.5°	2635.4	2198.5	98.3	26.4	14.2	10.1	7.1	5.1	5.1	4.1	4.1
60°	2755.0	2219.8	75.0	21.3	12.2	8.1	5.1	4.1	3.0	3.0	3.0
62.5°	2875.6	2233.0	57.8	17.2	10.1	6.1	4.1	3.0	2.0	1.0	1.0
65°	2981.0	2237.0	44.6	13.2	8.1	4.1	3.0	1.0	0.0	0.0	0.0
67.5°	3012.4	2190.4	34.5	10.1	6.1	3.0	2.0	0.0	0.0	0.0	0.0
70°	2927.3	2066.7	26.4	8.1	5.1	2.0	1.0	0.0	0.0	0.0	0.0
72.5°	2597.9	1733.3	20.3	5.1	4.1	2.0	1.0	0.0	0.0	0.0	0.0
75°	1858.9	924.4	14.2	4.1	3.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	855.5	357.8	10.1	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
80°	167.2	89.2	4.1	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.5	15.2	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	5.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	2.0	1.0	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)