

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: P397882

Luminaire Tested: **ARCH-S-PA1-50-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-830-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4484 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

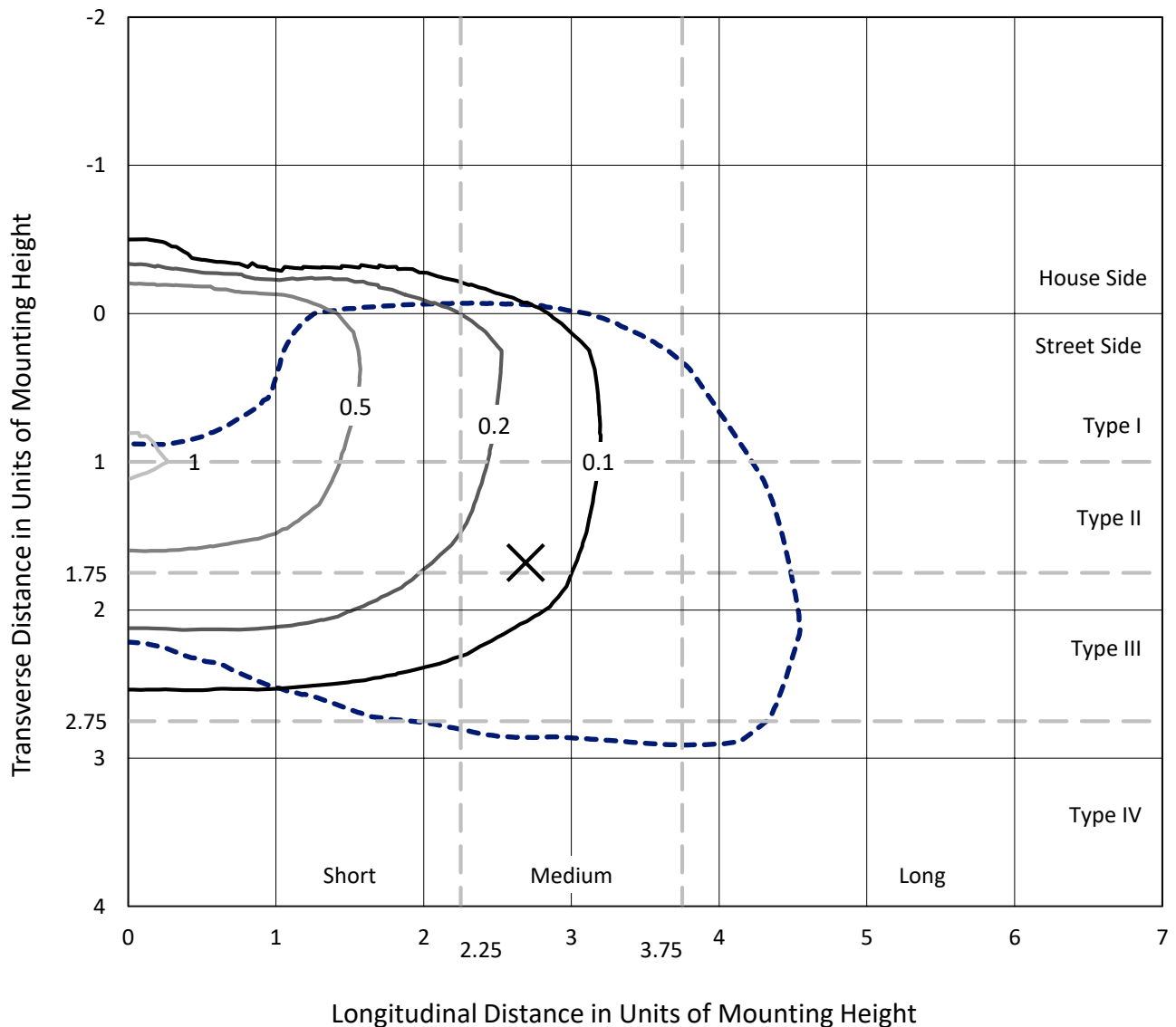


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

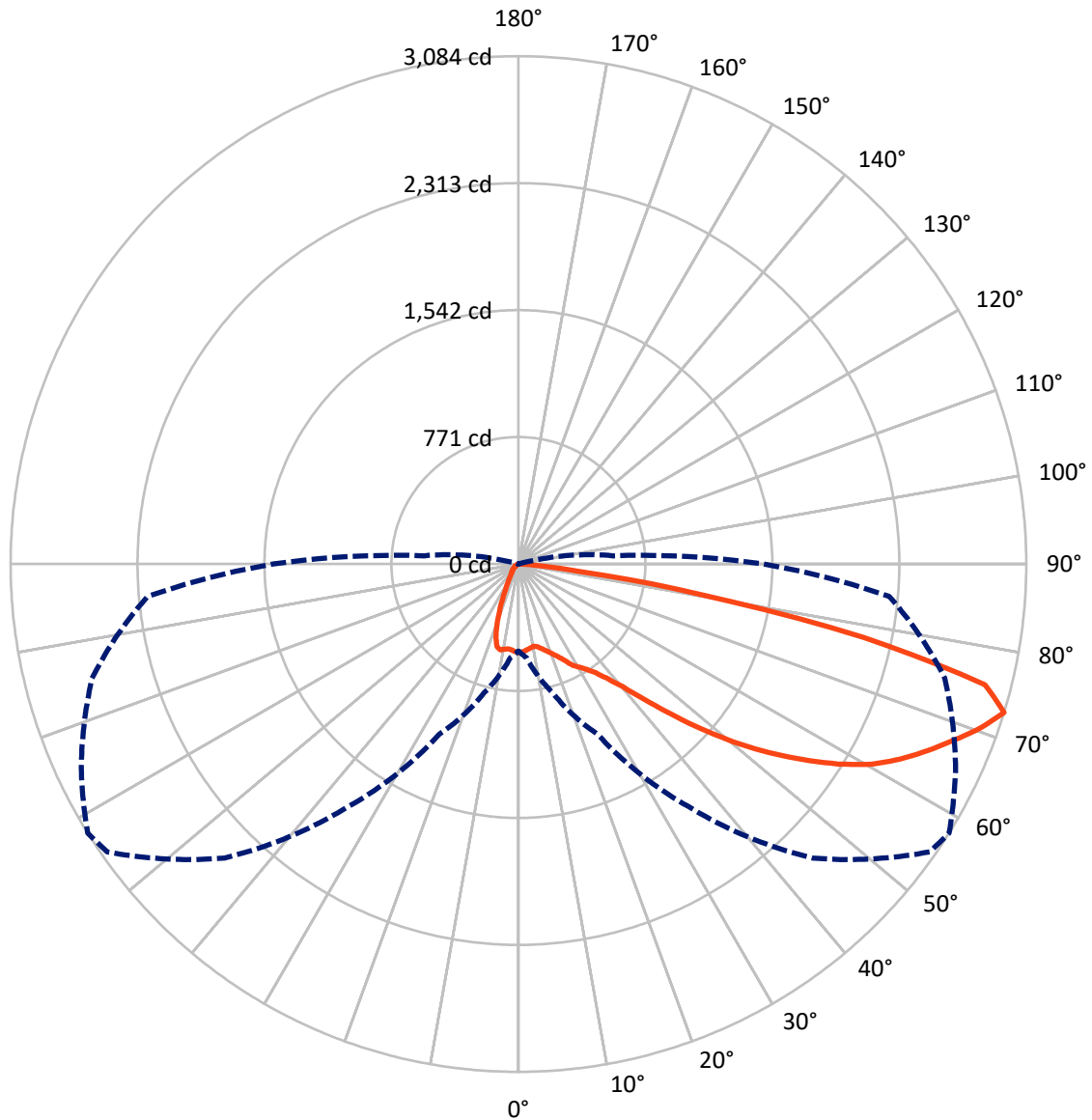


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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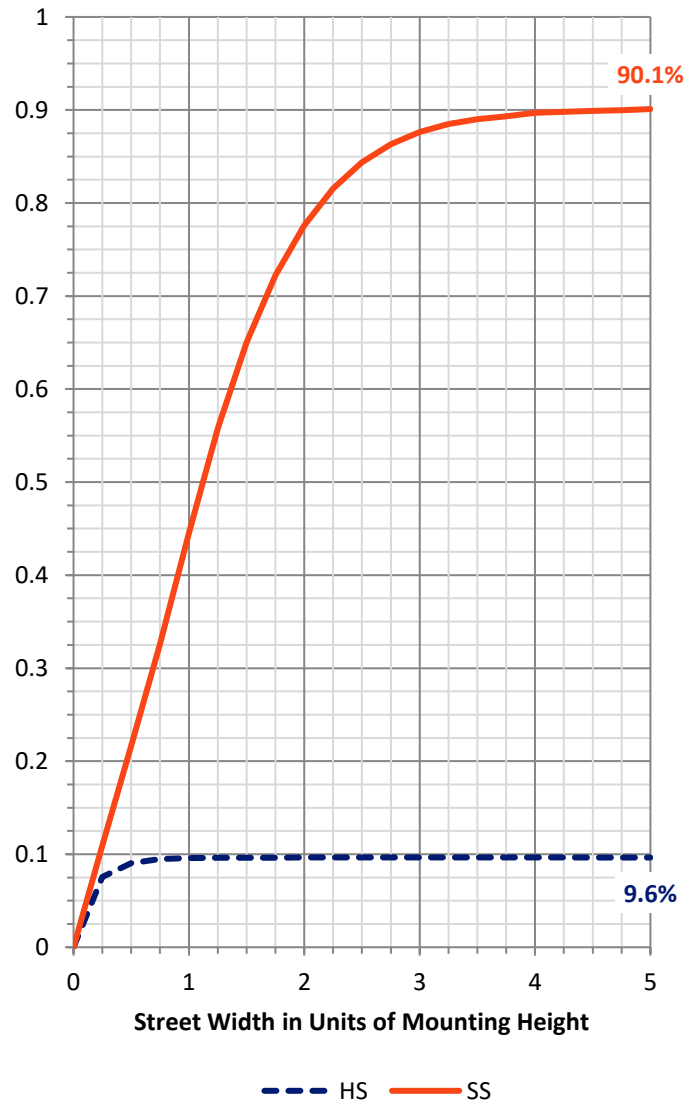
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	436.0	0.0	436.0
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	4048.0	0.0	4048.0
	% Fixture	90.3	0.0	90.3
Total	Lumens	4484.0	0.0	4484.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.1
10°-20°	128.6	2.9
20°-30°	202.0	4.5
30°-40°	348.4	7.8
40°-50°	662.9	14.8
50°-60°	1049.9	23.4
60°-70°	1225.1	27.3
70°-80°	767.3	17.1
80°-90°	50.4	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°	4484.0	100.0
0°-180°	4484.0	100.0



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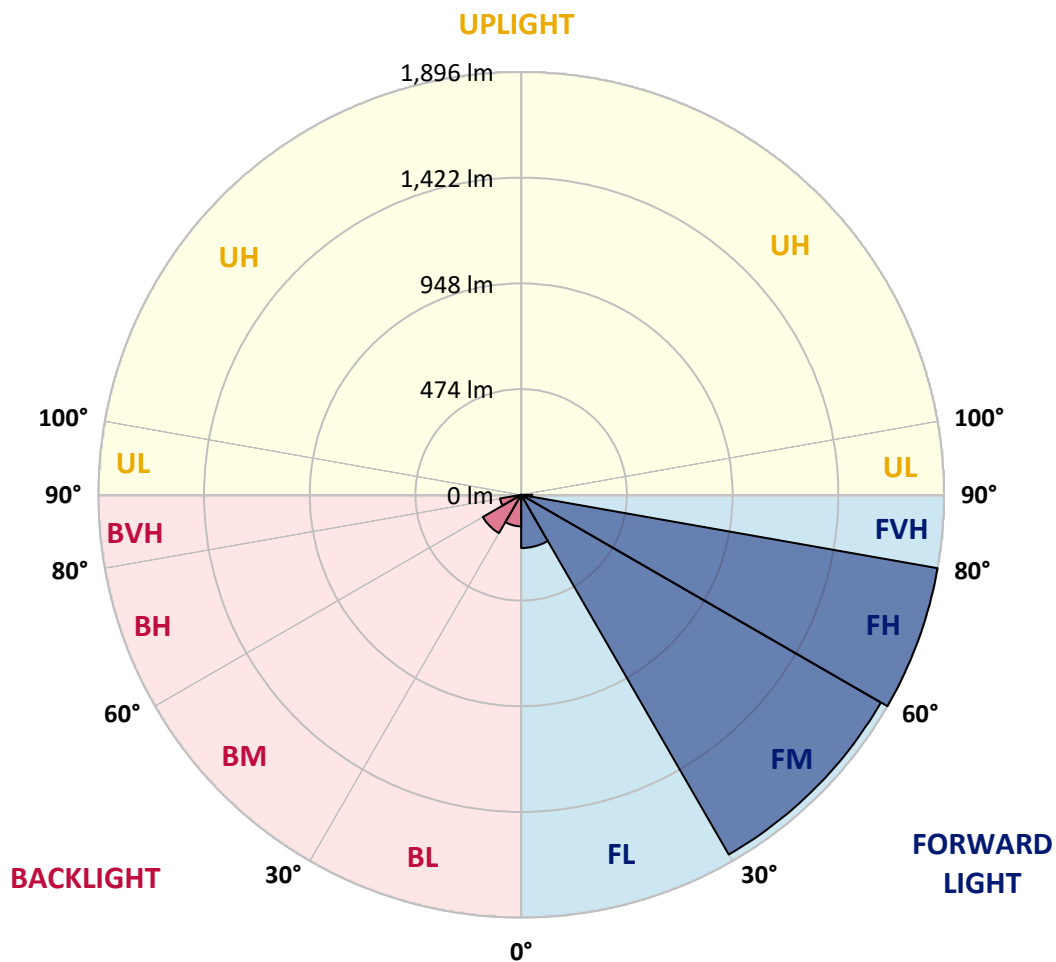
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	238.8	5.3			
FM	(30°-60°)	1862.8	41.5			
FH	(60°-80°)	1896.4	42.3			G2/5000
FVH	(80°-90°)	49.9	1.1			G1/100
BL	(0°-30°)	141.2	3.1	B1/500		
BM	(30°-60°)	198.4	4.4	B0/220		
BH	(60°-80°)	95.9	2.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1
2.5°	535.6	533.2	532.4	531.6	532.4	533.2	530.8	533.2	531.6	532.4	534.0
5°	516.4	514.0	513.2	514.0	516.4	520.4	522.0	524.4	524.4	526.8	527.6
7.5°	494.8	493.1	492.3	493.9	498.8	507.6	512.4	515.6	518.8	523.6	528.4
10°	482.7	481.9	481.1	483.5	488.3	496.4	502.8	507.6	519.6	533.2	542.1
12.5°	474.7	474.7	476.3	481.1	487.5	493.9	509.2	515.6	534.0	554.9	566.9
15°	468.3	468.3	470.7	479.5	488.3	503.6	526.0	533.2	554.9	580.6	596.6
17.5°	463.5	465.1	466.7	475.5	492.3	518.0	544.5	554.9	581.4	609.4	627.1
20°	464.3	465.9	466.7	475.5	499.6	534.8	568.5	580.6	611.0	640.7	658.3
22.5°	469.1	471.5	472.3	484.3	512.4	552.5	595.8	609.4	642.3	673.6	687.2
25°	489.1	490.7	485.9	496.4	530.8	579.7	631.1	645.5	678.4	707.2	718.5
27.5°	557.3	558.9	532.4	520.4	545.3	602.2	674.4	694.4	735.3	754.6	756.2
30°	704.8	706.4	654.3	597.4	579.7	621.4	698.4	726.5	779.4	801.1	791.4
32.5°	894.9	893.3	821.9	737.7	661.5	655.1	732.9	762.6	820.3	841.2	833.9
35°	1085.7	1088.1	1027.2	900.5	791.4	718.5	777.0	811.5	881.3	910.9	898.1
37.5°	1216.4	1232.5	1206.0	1068.9	951.0	835.5	848.4	885.3	972.7	1012.8	985.5
40°	1400.9	1396.9	1332.7	1231.7	1127.4	1008.7	963.8	981.5	1081.7	1135.4	1092.9
42.5°	1648.6	1640.6	1531.6	1432.9	1316.7	1219.6	1128.2	1125.0	1206.8	1269.4	1207.6
45°	1873.2	1861.1	1786.6	1691.1	1563.6	1452.2	1328.7	1300.6	1357.6	1410.5	1338.3
47.5°	2052.0	2031.9	1979.0	1928.5	1897.2	1724.0	1538.8	1496.3	1525.2	1564.4	1462.6
50°	2263.7	2208.3	2131.4	2100.9	2165.8	2031.9	1740.9	1700.0	1698.4	1720.8	1590.9
52.5°	2359.9	2259.7	2216.4	2242.0	2356.7	2318.2	1959.0	1900.4	1877.2	1879.6	1710.4
55°	2243.6	2232.4	2255.7	2335.8	2485.8	2463.3	2168.2	2096.1	2061.6	2018.3	1825.0
57.5°	2111.3	2145.8	2238.0	2391.2	2649.4	2614.9	2374.3	2292.5	2229.2	2129.8	1952.5
60°	1989.4	2024.7	2177.1	2404.0	2739.2	2760.8	2545.9	2468.1	2374.3	2243.6	2092.9
62.5°	1804.2	1831.5	2045.6	2385.6	2699.9	2845.8	2665.4	2606.9	2519.5	2351.9	2254.0
65°	1595.7	1613.4	1825.0	2238.0	2622.9	2836.2	2764.0	2731.2	2646.2	2464.9	2413.6
67.5°	1367.2	1388.0	1564.4	1972.6	2472.2	2791.3	2857.1	2853.8	2756.8	2590.0	2529.1
70°	1104.2	1105.8	1251.7	1635.8	2209.1	2701.5	2972.5	2979.7	2862.7	2683.8	2533.9
72.5°	528.4	571.7	811.5	1141.9	1795.4	2525.1	3047.9	3084.0	2929.2	2680.6	2260.5
75°	121.1	125.1	236.6	542.9	1052.9	1938.1	2859.5	2926.8	2767.2	2318.2	1592.5
77.5°	44.1	46.5	66.6	158.8	404.9	1001.5	2046.4	2145.0	2045.6	1498.7	753.0
80°	29.7	28.9	34.5	70.6	186.0	283.9	1046.4	1105.0	1008.7	511.6	180.4
82.5°	15.2	16.0	24.1	39.3	125.1	98.6	349.6	380.1	312.7	102.6	33.7
85°	7.2	7.2	13.6	24.9	52.9	34.5	77.8	93.8	84.2	44.9	11.2
87.5°	7.2	7.2	12.8	16.0	27.3	14.4	19.2	24.1	22.5	24.1	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°	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1	538.1
2.5°	534.0	533.2	532.4	534.0	533.2	534.8	534.8	536.4	536.4	534.8	534.0
5°	526.8	525.2	523.6	523.6	522.8	524.4	529.2	533.2	534.0	531.6	530.8
7.5°	527.6	527.6	526.0	522.8	517.2	517.2	517.2	522.0	524.4	522.8	522.0
10°	542.1	542.9	538.9	531.6	522.0	513.2	496.4	471.5	448.2	441.8	439.4
12.5°	566.9	567.7	559.7	546.9	526.8	474.7	410.6	351.2	305.5	292.7	290.3
15°	596.6	597.4	583.0	562.1	501.2	380.1	284.7	217.3	177.2	167.6	166.8
17.5°	627.1	625.5	603.8	563.7	425.0	269.4	173.2	138.7	128.3	125.9	126.7
20°	656.7	651.9	622.2	534.0	327.2	176.4	126.7	118.7	116.3	114.7	114.7
22.5°	684.0	674.4	637.5	475.5	229.3	126.7	113.1	111.5	108.3	105.8	105.0
25°	711.3	697.6	647.1	399.3	154.0	110.7	106.6	103.4	99.4	96.2	95.4
27.5°	744.1	724.9	642.3	303.1	115.5	102.6	99.4	94.6	89.0	84.2	82.6
30°	775.4	753.8	615.0	209.3	98.6	94.6	89.8	82.6	75.4	69.8	68.2
32.5°	814.7	789.8	566.1	137.1	85.8	82.6	77.8	69.0	59.3	52.9	51.3
35°	870.8	842.8	503.6	96.2	75.4	69.8	63.3	53.7	43.3	38.5	37.7
37.5°	949.4	911.7	425.0	77.8	66.6	58.5	48.9	39.3	32.1	28.1	27.3
40°	1045.6	987.9	337.6	69.0	59.3	48.9	36.9	28.1	23.3	20.0	20.0
42.5°	1149.9	1059.3	248.6	63.3	52.1	40.1	27.3	20.0	16.8	15.2	14.4
45°	1257.3	1122.6	167.6	58.5	45.7	30.5	19.2	13.6	11.2	11.2	10.4
47.5°	1368.8	1165.1	108.3	52.9	38.5	22.5	12.8	9.6	8.0	8.0	8.0
50°	1479.4	1187.6	77.0	48.1	31.3	15.2	9.6	7.2	6.4	6.4	6.4
52.5°	1559.6	1173.1	61.7	41.7	24.1	11.2	7.2	5.6	4.8	4.8	4.8
55°	1629.4	1148.3	53.7	36.1	17.6	8.0	5.6	4.8	4.0	4.0	4.0
57.5°	1700.8	1116.2	48.1	30.5	12.8	5.6	4.0	3.2	3.2	3.2	3.2
60°	1765.7	1061.7	41.7	24.1	8.8	4.0	3.2	2.4	2.4	2.4	2.4
62.5°	1829.1	1015.2	36.1	18.4	6.4	3.2	1.6	1.6	0.8	0.8	0.8
65°	1865.1	952.6	28.9	12.0	4.0	2.4	0.8	0.8	0.0	0.0	0.0
67.5°	1853.9	878.0	20.0	7.2	2.4	1.6	0.8	0.0	0.0	0.0	0.0
70°	1776.1	777.8	12.0	4.0	2.4	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	1487.5	575.7	7.2	3.2	1.6	0.8	0.0	0.0	0.0	0.0	0.0
75°	993.5	264.6	4.0	2.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	454.7	79.4	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.4	20.8	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.2	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	0.0	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)