

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: P397828

Luminaire Tested: **ARCH-S-PA1-50-727-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397828
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-PA1-50-727-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 4719 lumens
Efficiency: N/A
Efficacy: 87.4 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

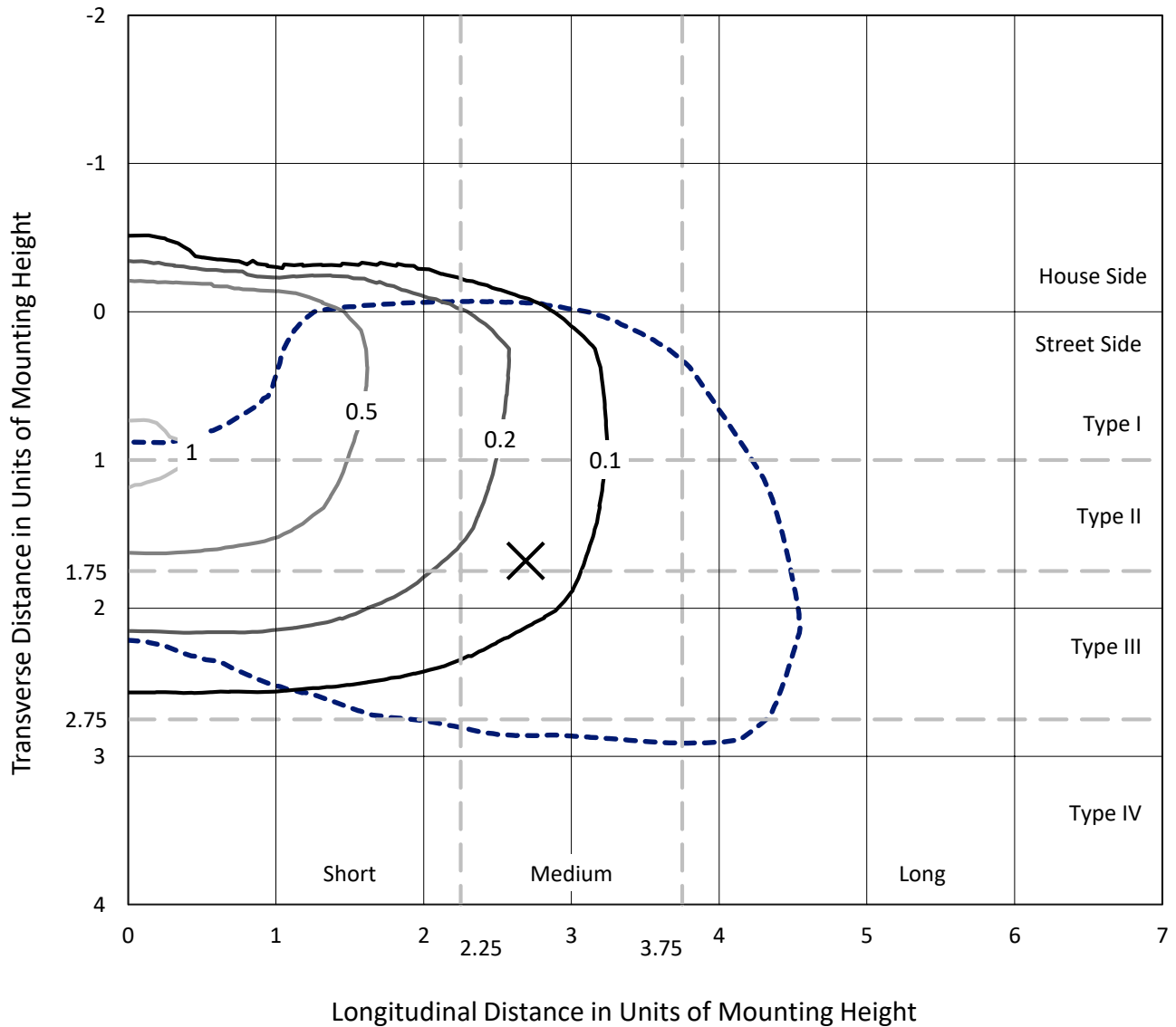


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

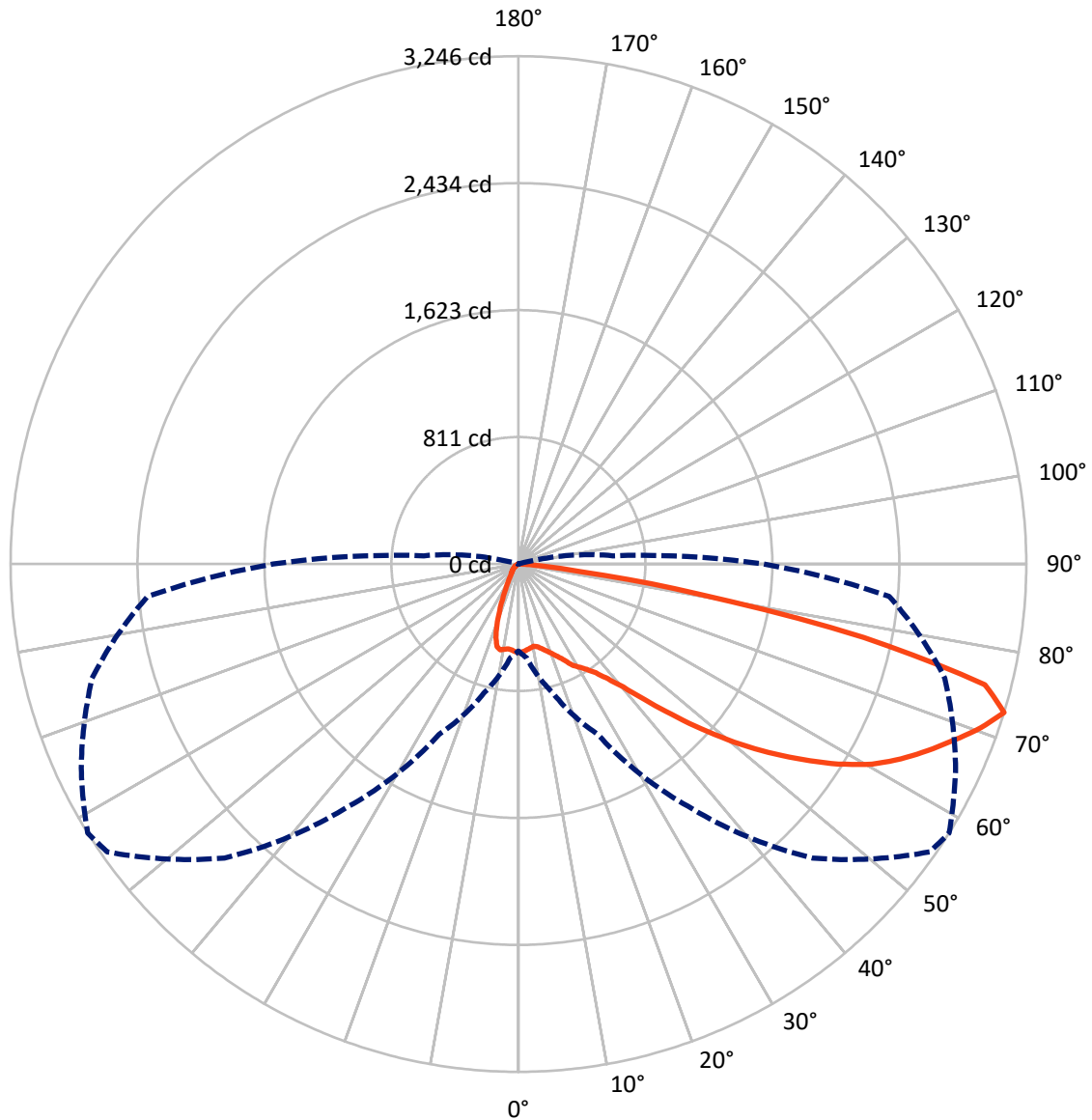


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - Non-Cutoff

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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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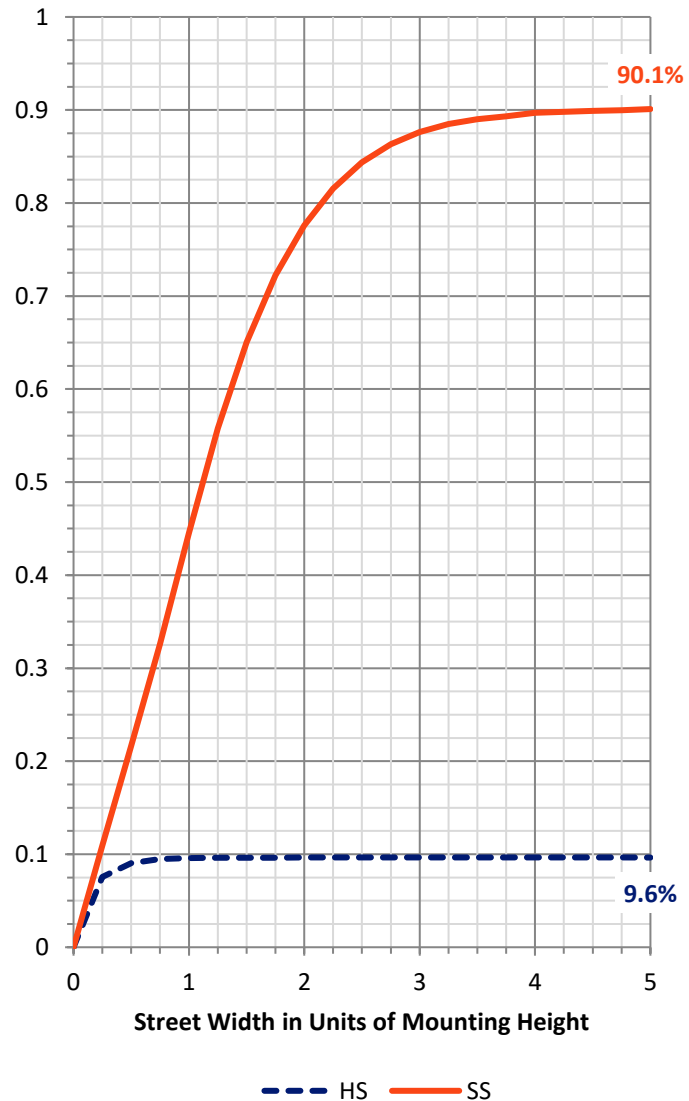
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	458.9	0.0	458.9
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	4260.1	0.0	4260.1
	% Fixture	90.3	0.0	90.3
Total	Lumens	4719.0	0.0	4719.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	1.1
10°-20°	135.4	2.9
20°-30°	212.6	4.5
30°-40°	366.7	7.8
40°-50°	697.7	14.8
50°-60°	1104.9	23.4
60°-70°	1289.3	27.3
70°-80°	807.5	17.1
80°-90°	53.0	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°	4719.0	100.0
0°-180°	4719.0	100.0



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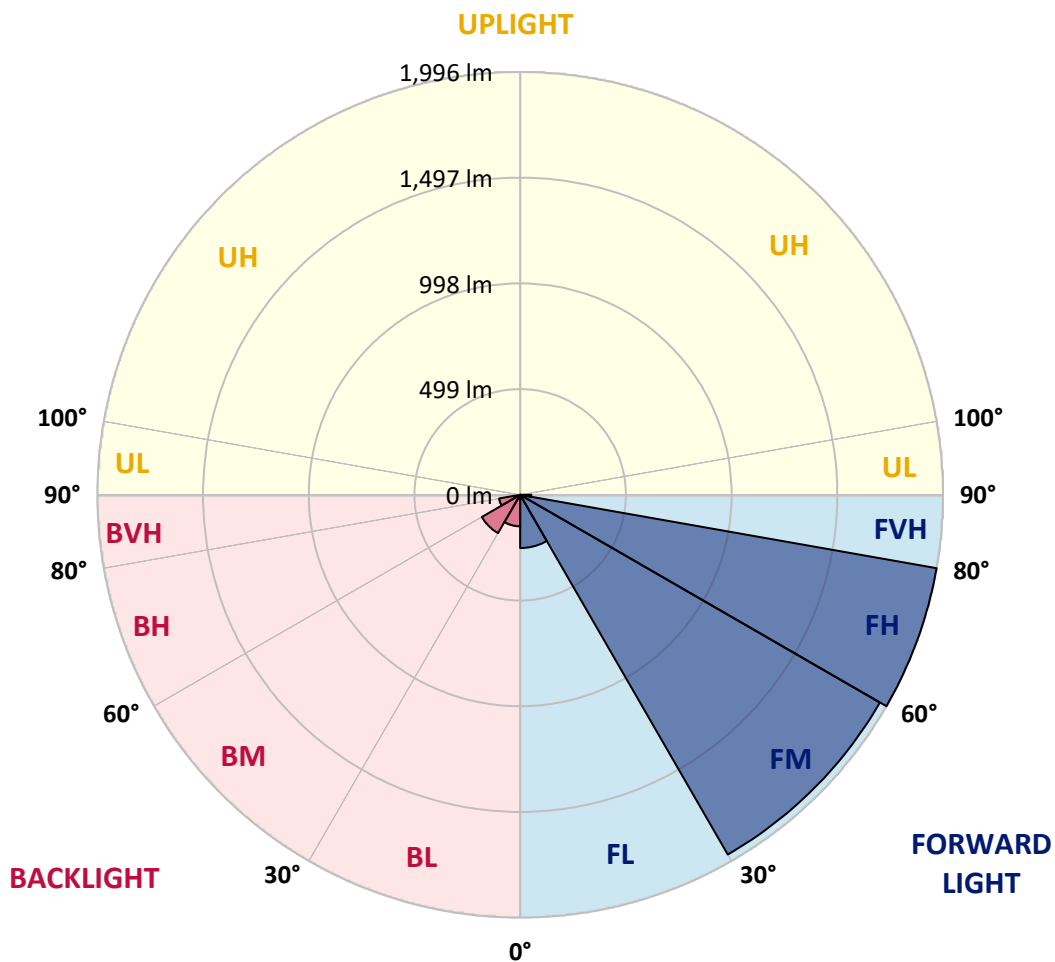
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	251.3	5.3			
FM	(30°-60°)	1960.5	41.5			
FH	(60°-80°)	1995.8	42.3			G2/5000
FVH	(80°-90°)	52.5	1.1			G1/100
BL	(0°-30°)	148.6	3.1	B1/500		
BM	(30°-60°)	208.8	4.4	B0/220		
BH	(60°-80°)	101.0	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°	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3
2.5°	563.7	561.2	560.3	559.5	560.3	561.2	558.7	561.2	559.5	560.3	562.0
5°	543.5	540.9	540.1	540.9	543.5	547.7	549.4	551.9	551.9	554.4	555.3
7.5°	520.7	519.0	518.1	519.8	524.9	534.2	539.2	542.6	546.0	551.1	556.1
10°	508.0	507.2	506.3	508.9	513.9	522.4	529.1	534.2	546.8	561.2	570.5
12.5°	499.6	499.6	501.3	506.3	513.1	519.8	535.9	542.6	562.0	584.0	596.6
15°	492.8	492.8	495.4	504.6	513.9	530.0	553.6	561.2	584.0	611.0	627.9
17.5°	487.8	489.5	491.1	500.4	518.1	545.2	573.0	584.0	611.8	641.4	659.9
20°	488.6	490.3	491.1	500.4	525.7	562.9	598.3	611.0	643.0	674.3	692.8
22.5°	493.7	496.2	497.1	509.7	539.2	581.4	627.0	641.4	676.0	708.9	723.2
25°	514.8	516.5	511.4	522.4	558.7	610.1	664.1	679.3	713.9	744.3	756.1
27.5°	586.5	588.2	560.3	547.7	573.8	633.8	709.7	730.8	773.8	794.1	795.8
30°	741.8	743.5	688.6	628.7	610.1	654.0	735.0	764.6	820.3	843.0	832.9
32.5°	941.8	940.1	865.0	776.4	696.2	689.5	771.3	802.5	863.3	885.2	877.6
35°	1142.6	1145.2	1081.0	947.7	832.9	756.1	817.7	854.0	927.4	958.7	945.2
37.5°	1280.2	1297.1	1269.2	1124.9	1000.9	879.3	892.8	931.7	1023.6	1065.8	1037.1
40°	1474.3	1470.1	1402.5	1296.2	1186.5	1061.6	1014.4	1032.9	1138.4	1195.0	1150.2
42.5°	1735.0	1726.6	1611.8	1508.0	1385.7	1283.6	1187.4	1184.0	1270.1	1335.9	1270.9
45°	1971.3	1958.7	1880.2	1779.8	1645.6	1528.3	1398.3	1368.8	1428.7	1484.4	1408.5
47.5°	2159.5	2138.4	2082.7	2029.6	1996.6	1814.4	1619.4	1574.7	1605.1	1646.4	1539.3
50°	2382.3	2324.1	2243.1	2211.0	2279.4	2138.4	1832.1	1789.1	1787.4	1811.0	1674.3
52.5°	2483.6	2378.1	2332.5	2359.5	2480.2	2439.7	2061.6	2000.0	1975.6	1978.1	1800.0
55°	2361.2	2349.4	2373.9	2458.3	2616.1	2592.4	2281.9	2205.9	2169.6	2124.1	1920.7
57.5°	2222.0	2258.3	2355.3	2516.5	2788.2	2751.9	2498.8	2412.7	2346.0	2241.4	2054.9
60°	2093.7	2130.8	2291.2	2530.0	2882.7	2905.5	2679.4	2597.5	2498.8	2361.2	2202.6
62.5°	1898.8	1927.4	2152.8	2510.6	2841.4	2995.0	2805.1	2743.5	2651.5	2475.1	2372.2
65°	1679.3	1697.9	1920.7	2355.3	2760.4	2984.8	2908.9	2874.3	2784.8	2594.1	2540.1
67.5°	1438.8	1460.8	1646.4	2076.0	2601.7	2937.6	3006.8	3003.4	2901.3	2725.8	2661.6
70°	1162.0	1163.7	1317.3	1721.5	2324.9	2843.1	3128.3	3135.9	3012.7	2824.5	2666.7
72.5°	556.1	601.7	854.0	1201.7	1889.5	2657.4	3207.6	3245.6	3082.7	2821.1	2378.9
75°	127.4	131.6	248.9	571.3	1108.0	2039.7	3009.3	3080.2	2912.3	2439.7	1676.0
77.5°	46.4	48.9	70.0	167.1	426.2	1054.0	2153.6	2257.4	2152.8	1577.2	792.4
80°	31.2	30.4	36.3	74.3	195.8	298.7	1101.3	1162.9	1061.6	538.4	189.9
82.5°	16.0	16.9	25.3	41.4	131.6	103.8	367.9	400.0	329.1	108.0	35.4
85°	7.6	7.6	14.3	26.2	55.7	36.3	81.9	98.7	88.6	47.3	11.8
87.5°	7.6	7.6	13.5	16.9	28.7	15.2	20.3	25.3	23.6	25.3	4.2
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°	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3	566.3
2.5°	562.0	561.2	560.3	562.0	561.2	562.9	562.9	564.6	564.6	562.9	562.0
5°	554.4	552.7	551.1	551.1	550.2	551.9	557.0	561.2	562.0	559.5	558.7
7.5°	555.3	555.3	553.6	550.2	544.3	544.3	544.3	549.4	551.9	550.2	549.4
10°	570.5	571.3	567.1	559.5	549.4	540.1	522.4	496.2	471.7	465.0	462.5
12.5°	596.6	597.5	589.0	575.5	554.4	499.6	432.1	369.6	321.5	308.0	305.5
15°	627.9	628.7	613.5	591.6	527.4	400.0	299.6	228.7	186.5	176.4	175.5
17.5°	659.9	658.2	635.5	593.3	447.3	283.5	182.3	146.0	135.0	132.5	133.3
20°	691.1	686.1	654.9	562.0	344.3	185.7	133.3	124.9	122.4	120.7	120.7
22.5°	719.8	709.7	670.9	500.4	241.4	133.3	119.0	117.3	113.9	111.4	110.5
25°	748.5	734.2	681.0	420.3	162.0	116.5	112.2	108.9	104.6	101.3	100.4
27.5°	783.1	762.9	676.0	319.0	121.5	108.0	104.6	99.6	93.7	88.6	86.9
30°	816.0	793.3	647.3	220.3	103.8	99.6	94.5	86.9	79.3	73.4	71.7
32.5°	857.4	831.2	595.8	144.3	90.3	86.9	81.9	72.6	62.4	55.7	54.0
35°	916.5	886.9	530.0	101.3	79.3	73.4	66.7	56.5	45.6	40.5	39.7
37.5°	999.2	959.5	447.3	81.9	70.0	61.6	51.5	41.4	33.8	29.5	28.7
40°	1100.4	1039.7	355.3	72.6	62.4	51.5	38.8	29.5	24.5	21.1	21.1
42.5°	1210.1	1114.8	261.6	66.7	54.9	42.2	28.7	21.1	17.7	16.0	15.2
45°	1323.2	1181.4	176.4	61.6	48.1	32.1	20.3	14.3	11.8	11.8	11.0
47.5°	1440.5	1226.2	113.9	55.7	40.5	23.6	13.5	10.1	8.4	8.4	8.4
50°	1557.0	1249.8	81.0	50.6	32.9	16.0	10.1	7.6	6.8	6.8	6.8
52.5°	1641.4	1234.6	65.0	43.9	25.3	11.8	7.6	5.9	5.1	5.1	5.1
55°	1714.8	1208.5	56.5	38.0	18.6	8.4	5.9	5.1	4.2	4.2	4.2
57.5°	1789.9	1174.7	50.6	32.1	13.5	5.9	4.2	3.4	3.4	3.4	3.4
60°	1858.2	1117.3	43.9	25.3	9.3	4.2	3.4	2.5	2.5	2.5	2.5
62.5°	1924.9	1068.4	38.0	19.4	6.8	3.4	1.7	1.7	0.8	0.8	0.8
65°	1962.9	1002.5	30.4	12.7	4.2	2.5	0.8	0.8	0.0	0.0	0.0
67.5°	1951.1	924.1	21.1	7.6	2.5	1.7	0.8	0.0	0.0	0.0	0.0
70°	1869.2	818.6	12.7	4.2	2.5	1.7	0.8	0.0	0.0	0.0	0.0
72.5°	1565.4	605.9	7.6	3.4	1.7	0.8	0.0	0.0	0.0	0.0	0.0
75°	1045.6	278.5	4.2	2.5	0.8	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	478.5	83.5	2.5	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	96.2	21.9	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.3	4.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	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)