

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: P348902

Luminaire Tested: **ARCH-N-PA1-50-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3537 lumens
Efficiency: N/A
Efficacy: 68.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

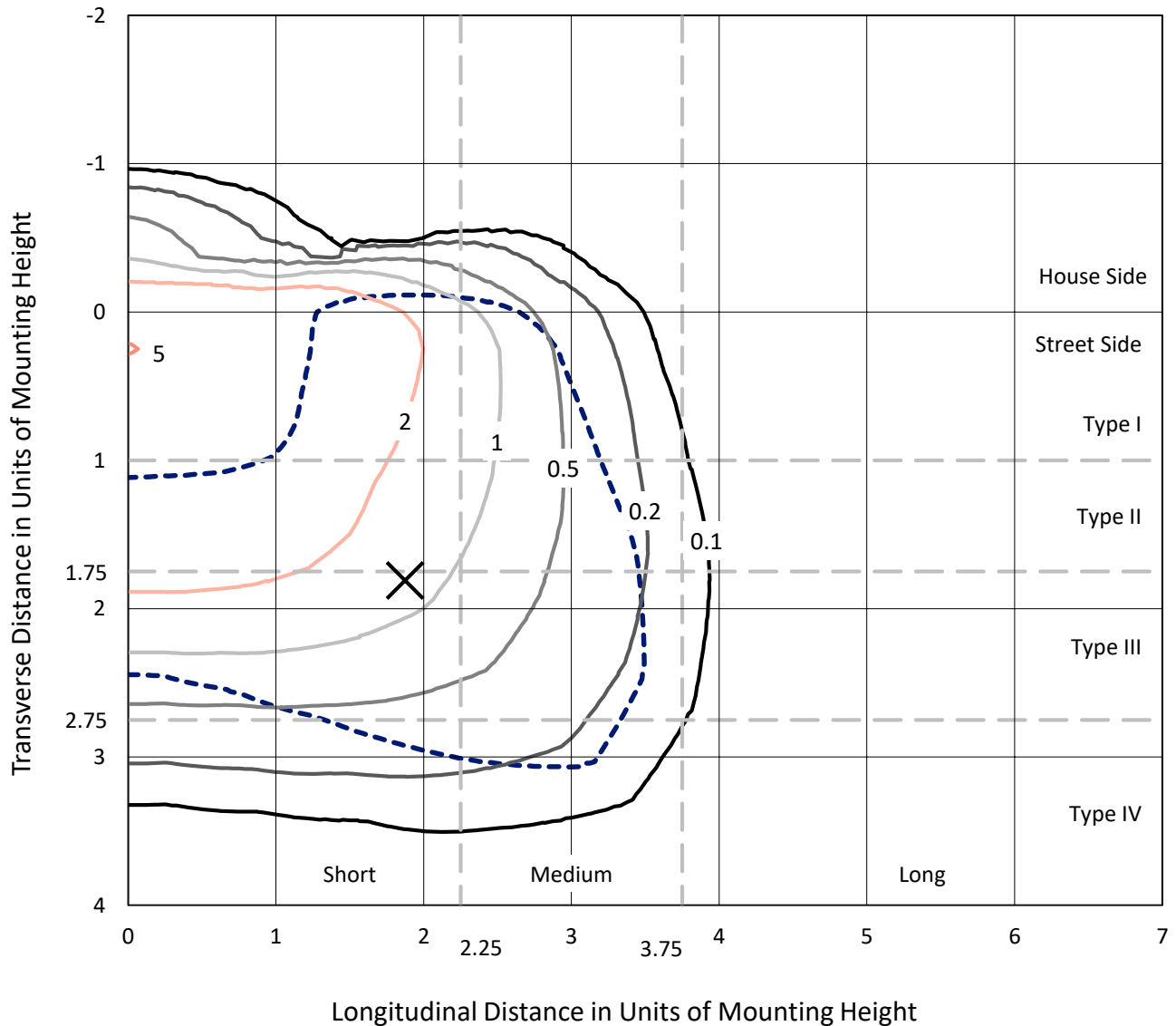
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

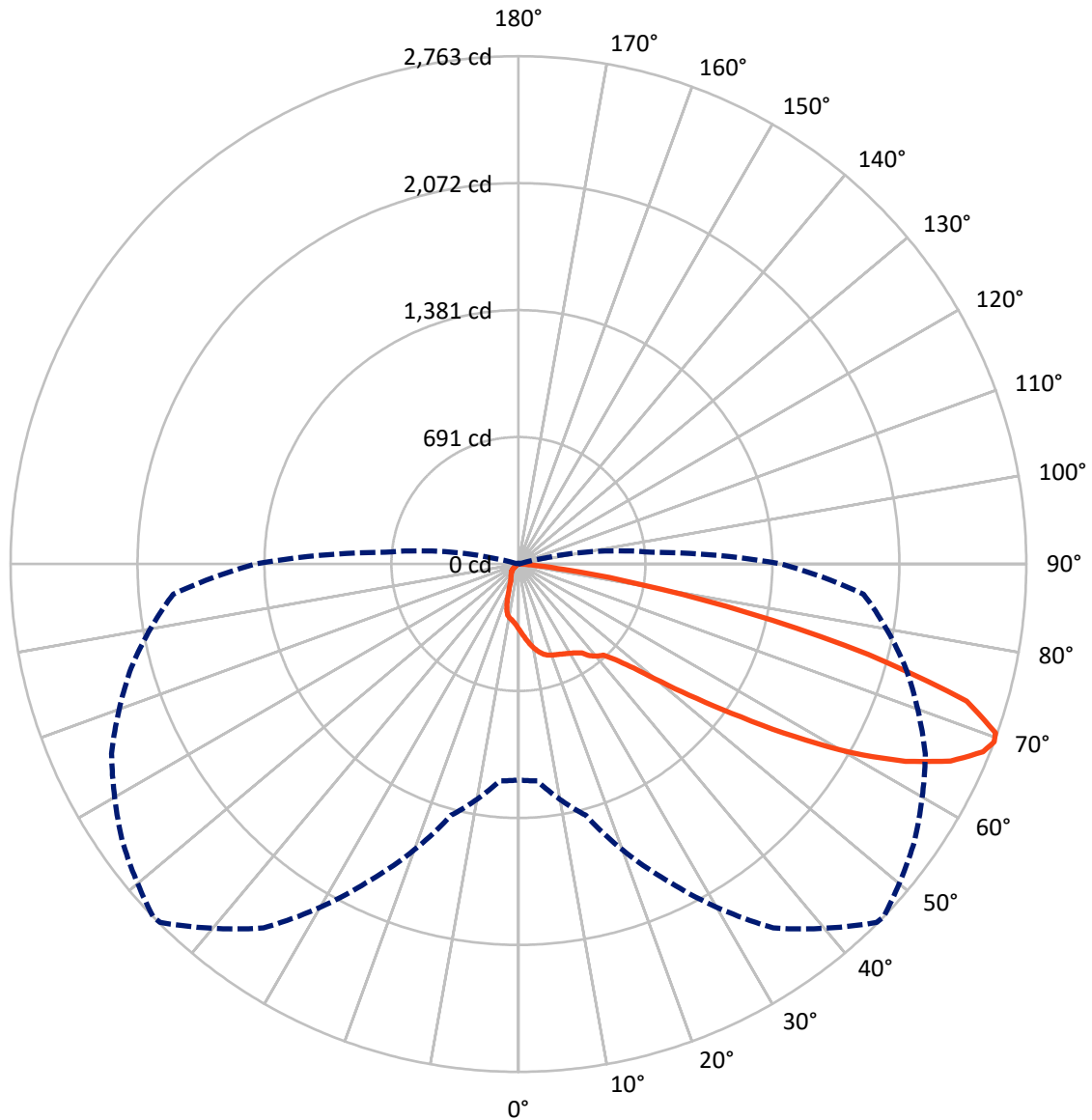


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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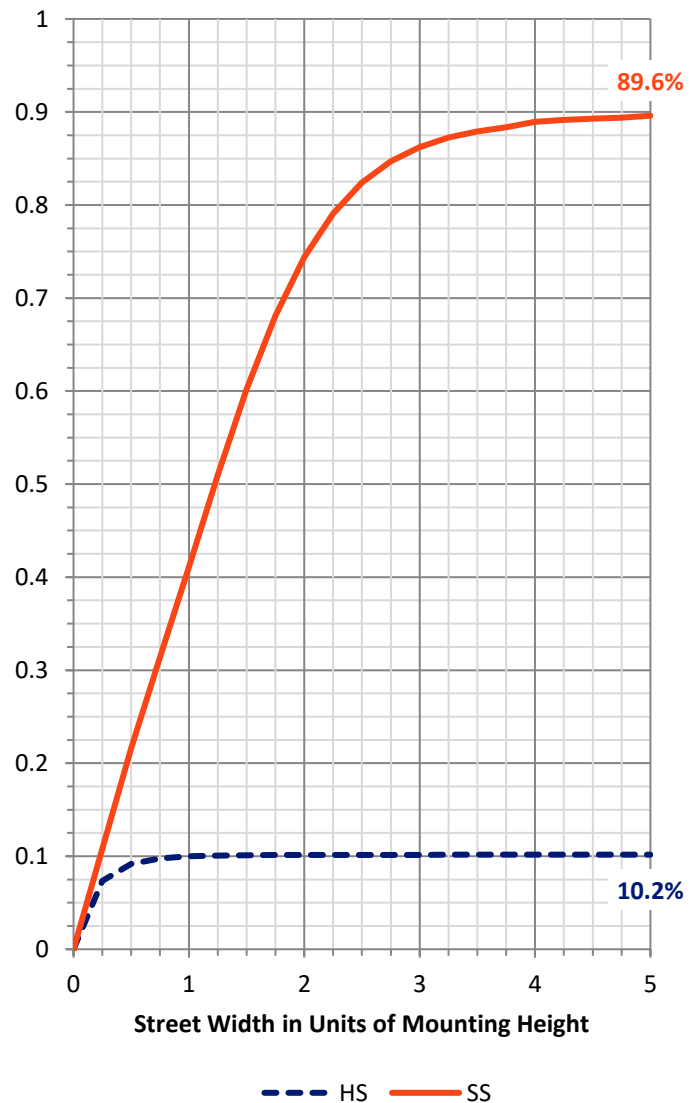
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	363.0	0.0	363.0
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	3174.0	0.0	3174.0
	% Fixture	89.7	0.0	89.7
Total	Lumens	3537.0	0.0	3537.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	1.0
10°-20°	107.0	3.0
20°-30°	168.3	4.8
30°-40°	241.3	6.8
40°-50°	417.1	11.8
50°-60°	824.1	23.3
60°-70°	1151.7	32.6
70°-80°	556.4	15.7
80°-90°	35.8	1.0
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°	3537.0	100.0
0°-180°	3537.0	100.0



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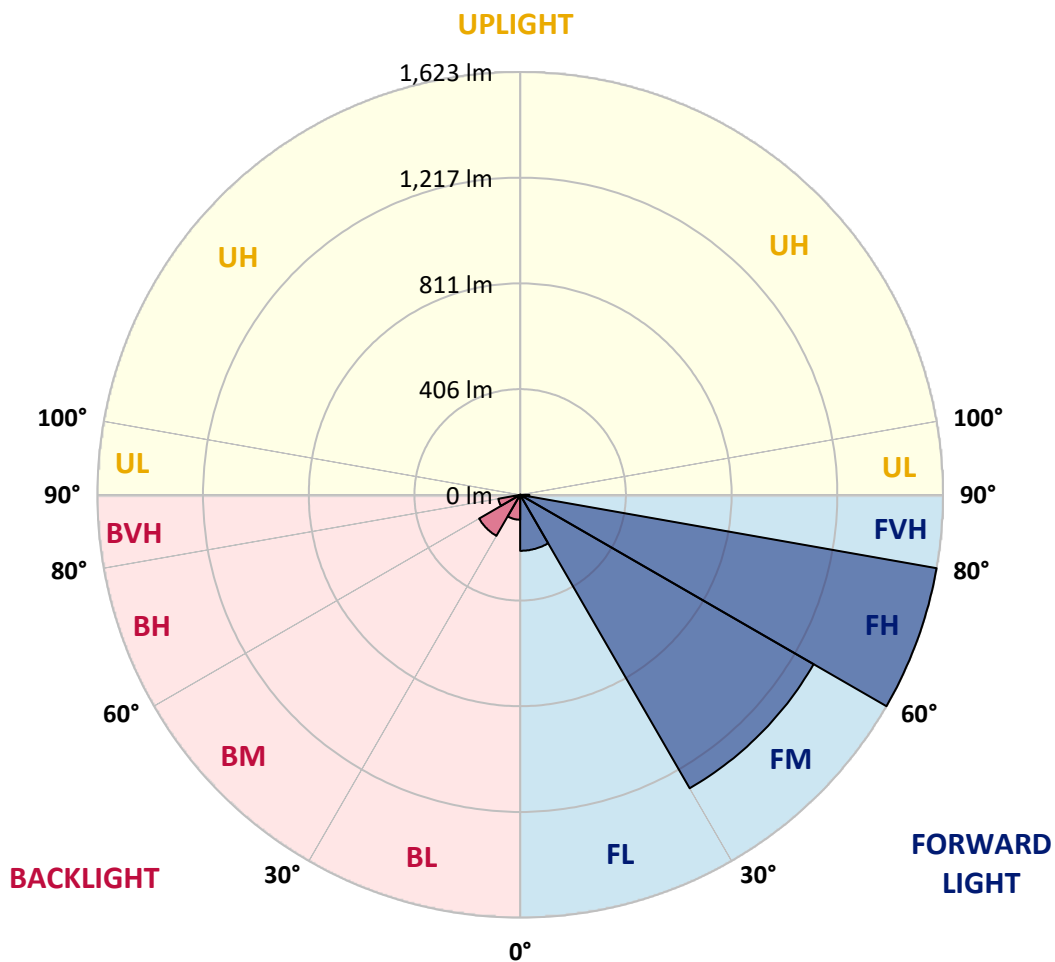
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	214.9	6.1			
FM (30°-60°)	1300.6	36.8			
FH (60°-80°)	1623.0	45.9			G1/1800
FVH (80°-90°)	35.5	1.0			G1/100
BL (0°-30°)	95.7	2.7	B0/110		
BM (30°-60°)	181.9	5.1	B0/220		
BH (60°-80°)	85.1	2.4	B0/110		G0/110
BVH (80°-90°)	0.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4
2.5°	393.7	393.2	390.9	389.9	384.2	380.9	379.6	375.5	369.5	363.5	356.9
5°	438.5	438.3	434.0	429.9	419.2	409.3	407.5	397.8	384.4	371.8	359.2
7.5°	484.2	482.1	477.8	469.8	454.4	438.5	437.0	423.4	404.3	386.1	368.0
10°	523.1	521.7	516.1	504.0	485.9	467.8	466.0	449.3	427.7	405.3	382.3
12.5°	553.2	552.2	544.8	529.7	510.4	491.7	489.2	474.3	451.2	426.2	399.0
15°	571.6	571.1	562.0	545.9	527.0	510.8	508.6	495.5	474.1	447.9	417.2
17.5°	576.0	576.1	566.7	550.4	534.8	523.2	521.6	511.6	493.7	467.7	435.5
20°	566.3	568.3	559.9	545.8	536.2	530.0	528.7	522.7	507.6	483.1	450.1
22.5°	552.7	553.7	547.9	538.5	534.5	535.7	535.0	531.7	518.9	496.4	464.5
25°	544.4	544.4	541.0	533.0	535.7	542.8	543.0	542.3	532.2	512.6	482.1
27.5°	544.1	543.1	539.1	533.2	540.5	551.4	552.1	556.5	550.2	532.3	504.0
30°	557.4	556.2	547.8	540.0	549.3	561.0	562.7	572.5	569.3	553.7	528.4
32.5°	588.4	584.2	565.5	552.7	559.7	573.8	576.0	591.5	596.5	580.1	551.9
35°	630.8	617.7	590.7	576.9	577.6	592.4	594.4	617.2	632.0	604.3	570.1
37.5°	689.4	682.9	639.0	602.2	605.1	627.5	633.3	658.2	654.1	617.6	590.9
40°	817.7	807.6	760.9	672.8	631.5	656.1	657.9	671.1	671.5	647.6	634.0
42.5°	992.5	988.4	939.1	801.0	683.4	675.1	678.4	700.8	725.9	710.9	710.3
45°	1186.1	1183.9	1131.7	971.1	788.4	737.6	741.8	771.8	819.7	823.1	844.1
47.5°	1341.8	1340.8	1310.8	1161.0	949.1	843.6	844.9	876.8	961.0	1002.7	1036.3
50°	1483.7	1488.6	1464.8	1366.5	1168.0	1009.6	1006.5	1027.7	1163.0	1231.2	1273.0
52.5°	1681.1	1687.9	1621.4	1558.2	1397.7	1215.6	1213.1	1235.3	1405.8	1456.9	1464.3
55°	1855.4	1843.8	1791.2	1773.0	1677.8	1470.0	1469.3	1488.9	1640.6	1662.4	1676.1
57.5°	1932.3	1927.9	1953.2	1995.0	1971.1	1770.6	1769.2	1754.2	1850.7	1853.1	1895.4
60°	1980.9	1986.4	2064.2	2193.0	2252.6	2094.2	2084.6	1993.5	2051.4	2046.3	2091.5
62.5°	1944.4	1955.2	2095.2	2309.9	2463.2	2376.6	2363.0	2212.8	2222.9	2205.1	2247.3
65°	1750.7	1767.5	1996.8	2287.9	2567.7	2597.3	2583.6	2406.3	2359.0	2329.8	2306.5
67.5°	1421.6	1431.5	1671.0	2096.0	2520.6	2729.0	2726.2	2575.9	2461.9	2308.8	2127.4
69°	1174.8	1184.6	1415.1	1894.0	2416.9	2757.2	2762.7	2630.3	2442.3	2180.8	1884.9
70°	995.0	1005.5	1220.2	1720.9	2296.7	2744.1	2753.9	2625.2	2386.2	2032.5	1672.1
72.5°	521.9	530.8	751.2	1185.6	1872.3	2519.7	2549.4	2403.3	2022.7	1476.1	988.7
75°	164.0	169.2	293.4	619.7	1281.9	1959.2	1966.0	1885.2	1436.3	811.9	411.8
77.5°	62.5	61.0	97.7	228.4	648.1	1233.7	1275.3	1178.1	753.7	287.1	95.0
80°	33.7	33.8	50.7	94.5	277.3	634.0	669.2	571.0	267.8	89.6	21.9
82.5°	14.6	15.3	28.5	50.1	127.4	233.8	251.4	209.3	102.3	60.2	8.1
85°	3.2	3.5	13.8	27.2	51.9	65.7	68.8	67.8	65.2	46.8	3.2
87.5°	0.0	0.0	6.1	9.8	13.1	14.9	13.1	17.1	36.0	31.5	1.7
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°	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4
2.5°	354.7	351.7	346.6	341.0	337.0	332.8	329.5	328.0	326.4	325.2	326.7
5°	354.1	348.3	338.3	328.7	321.7	316.1	311.4	309.6	307.8	306.5	306.3
7.5°	359.9	351.7	336.5	322.4	311.6	304.0	297.7	295.0	292.9	291.9	291.0
10°	371.0	360.5	340.1	321.7	307.8	294.9	281.3	270.8	264.0	260.9	259.7
12.5°	385.4	372.3	347.1	325.2	305.0	280.1	251.2	226.4	210.3	205.0	201.8
15°	402.3	386.1	356.2	329.7	294.7	249.3	200.3	167.8	152.9	149.9	146.6
17.5°	418.6	400.7	367.2	330.5	272.1	199.2	146.8	124.7	118.9	120.9	121.4
20°	432.8	415.1	377.9	323.2	231.2	149.4	113.6	108.1	110.3	114.1	114.8
22.5°	447.3	429.0	387.9	304.0	178.8	113.4	102.3	103.6	105.8	109.6	110.3
25°	464.8	445.9	397.2	268.7	134.2	96.5	97.2	99.2	101.3	104.8	105.1
27.5°	485.1	467.3	403.3	222.7	99.5	88.7	90.9	93.9	96.0	99.3	100.0
30°	511.9	495.5	405.3	175.1	83.4	81.8	82.8	86.4	89.6	92.5	93.0
32.5°	537.1	523.4	398.7	132.2	77.3	75.3	75.3	77.4	81.1	83.9	84.6
35°	560.4	551.4	377.4	96.7	72.6	69.3	67.7	67.7	70.0	72.3	73.0
37.5°	591.0	590.7	343.1	77.1	68.2	64.3	60.9	58.2	57.4	57.9	58.2
40°	643.6	644.1	298.3	69.2	64.3	59.2	53.9	49.1	44.6	43.1	43.0
42.5°	725.7	718.2	251.4	65.3	61.0	53.9	45.9	39.5	32.5	30.3	30.2
45°	856.1	811.8	201.7	61.9	57.5	47.9	38.0	29.2	23.5	21.9	21.9
47.5°	1045.9	934.7	156.2	58.0	52.9	41.1	28.7	21.1	17.2	16.4	16.6
50°	1242.3	1055.1	119.7	53.2	47.3	34.0	21.2	15.3	13.1	13.1	13.3
52.5°	1416.4	1143.3	93.4	48.1	40.3	26.7	16.1	11.9	10.9	10.8	10.9
55°	1579.4	1200.2	71.5	42.1	32.0	19.9	12.3	9.8	9.1	8.8	8.6
57.5°	1736.6	1228.4	53.6	34.0	23.2	14.4	9.8	8.3	7.6	7.1	7.0
60°	1841.3	1205.5	36.8	25.0	16.1	10.4	8.1	7.1	6.3	5.8	5.6
62.5°	1900.3	1143.0	23.7	18.1	11.4	7.8	6.5	6.0	4.8	4.3	4.3
65°	1876.4	1039.8	16.6	12.9	8.3	5.8	4.8	4.8	3.5	2.8	2.7
67.5°	1662.8	878.4	12.6	9.6	6.0	4.3	3.6	4.1	2.2	1.3	1.3
69°	1430.7	728.0	10.8	8.0	5.0	3.5	3.2	3.8	1.5	1.0	0.8
70°	1243.4	628.0	9.8	7.0	4.1	3.0	2.8	3.6	1.5	0.8	0.7
72.5°	743.9	350.2	7.5	5.0	2.7	2.3	2.3	4.1	1.5	0.8	0.7
75°	300.7	123.4	5.5	3.5	2.0	2.0	2.8	5.3	1.3	0.7	0.5
77.5°	68.2	27.0	3.2	2.2	1.3	2.0	3.3	4.1	0.8	0.3	0.0
80°	16.6	6.6	2.0	1.3	0.8	1.5	2.5	2.3	0.2	0.0	0.0
82.5°	5.5	2.3	0.8	0.7	0.2	0.5	1.2	0.7	0.0	0.0	0.0
85°	2.3	1.3	0.3	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.5	0.5	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)