

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: P348818

Luminaire Tested: **ARCH-N-PA1-50-730-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-730-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4342 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - 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

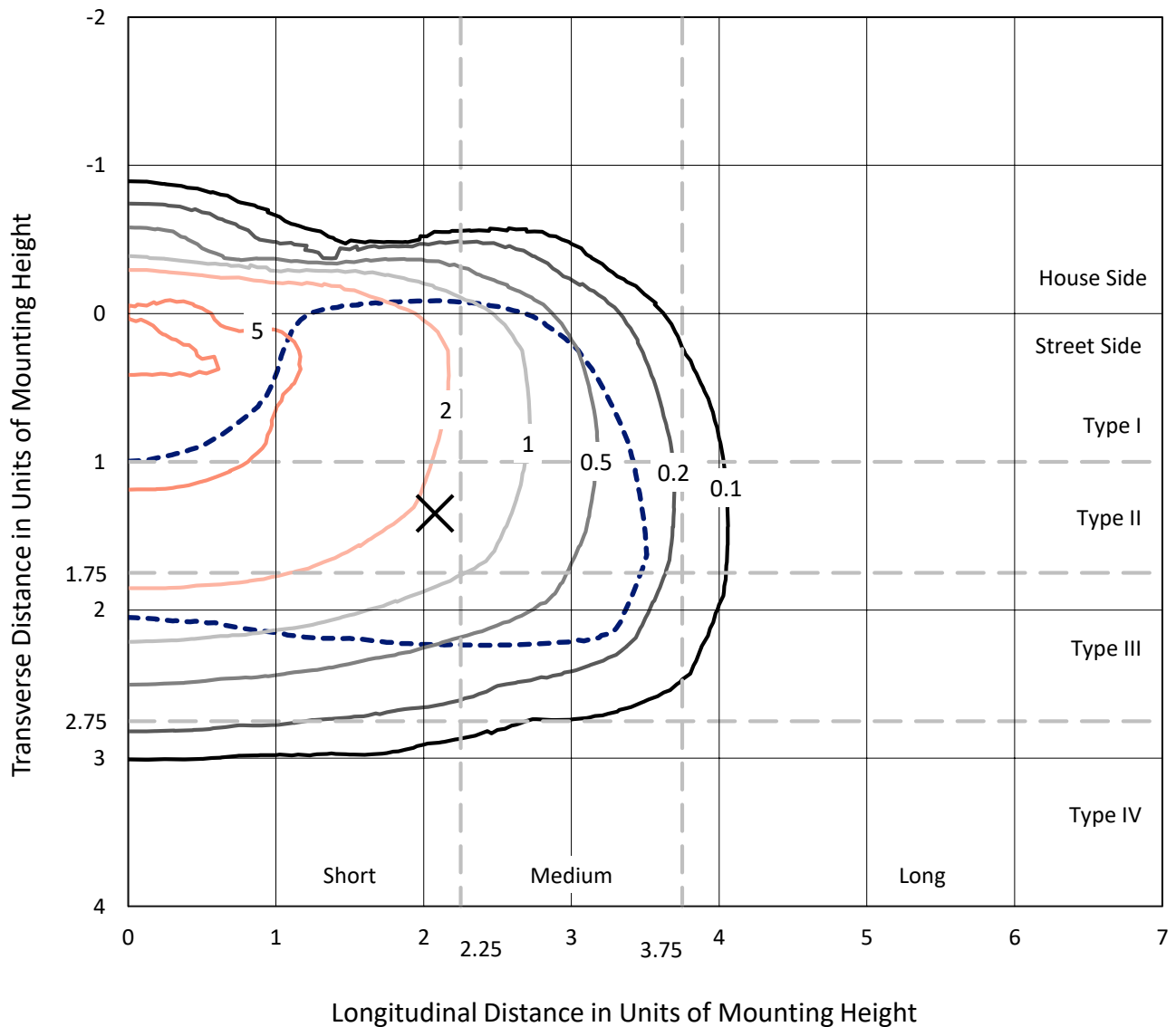


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

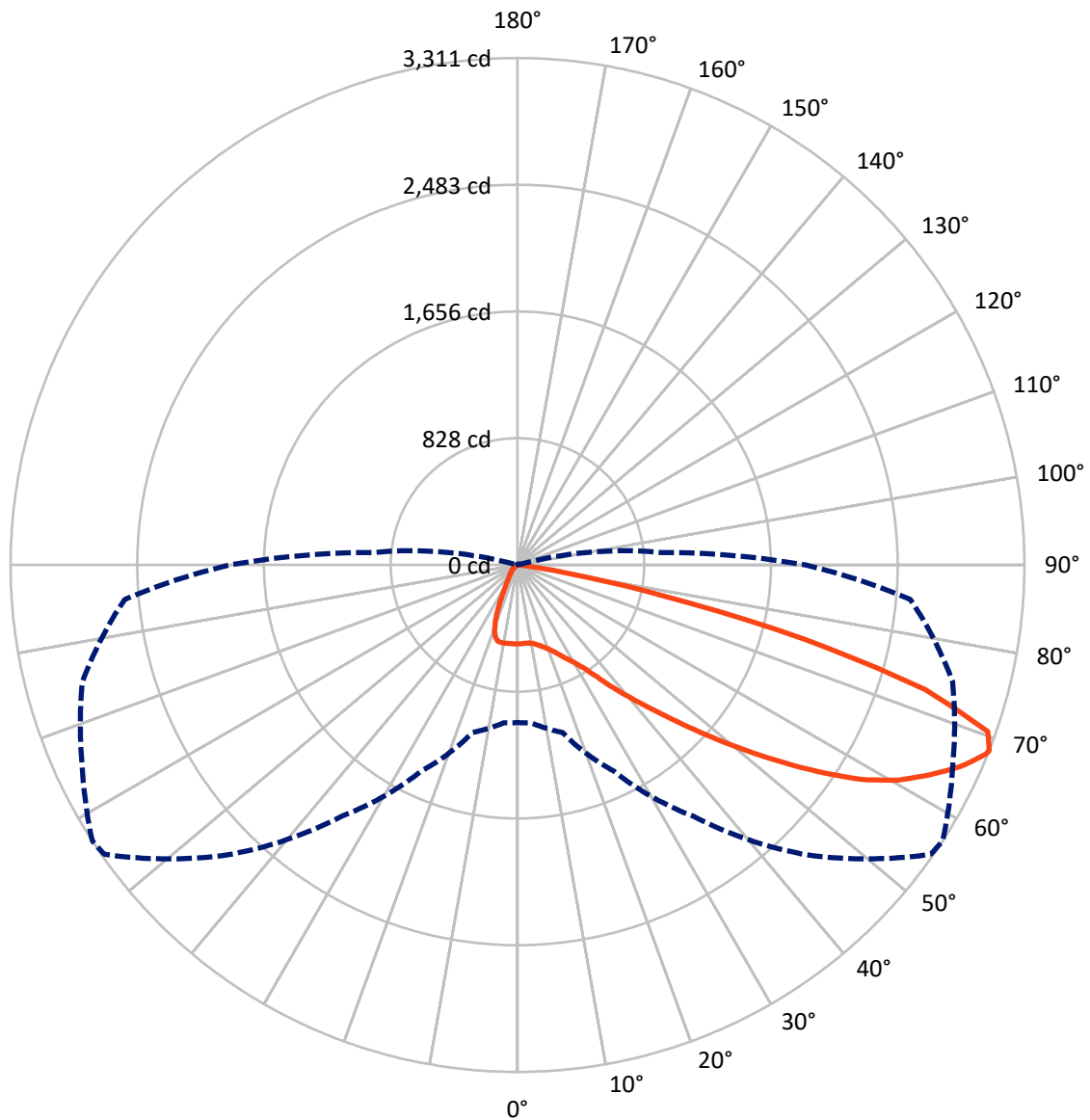


Based on 10 foot mounting height. Maximum calculated value = 6.7 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



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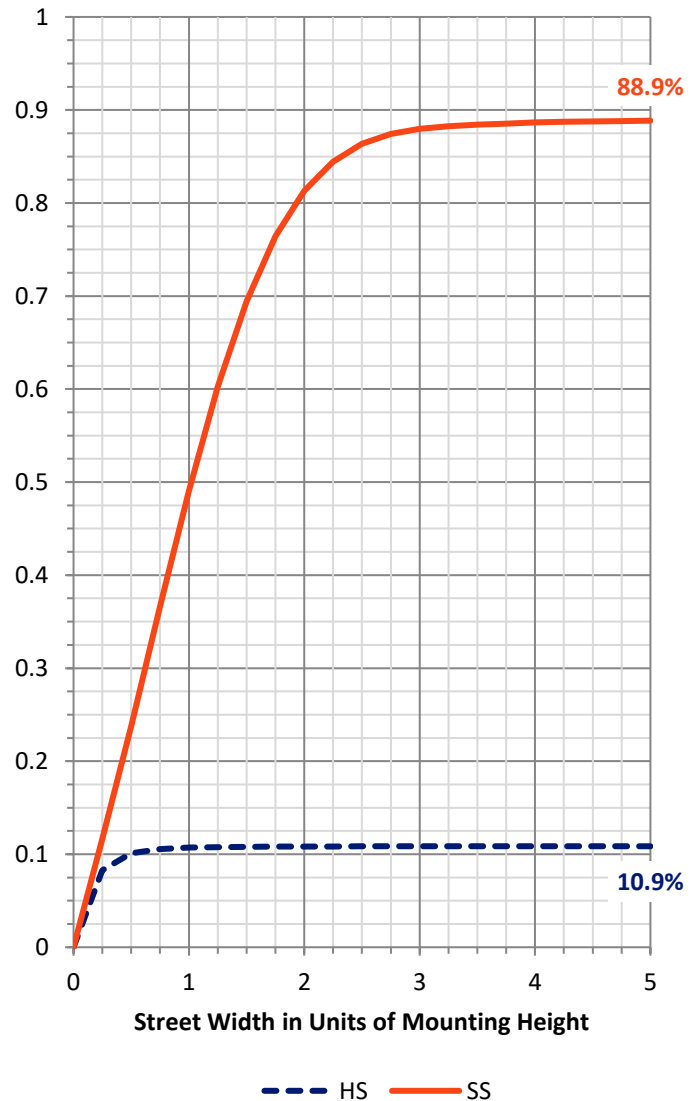
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	476.1	0.0	476.1
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	3865.9	0.0	3865.9
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	4342.0	0.0	4342.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	1.1
10°-20°	133.8	3.1
20°-30°	230.8	5.3
30°-40°	398.4	9.2
40°-50°	681.4	15.7
50°-60°	1090.2	25.1
60°-70°	1259.7	29.0
70°-80°	481.3	11.1
80°-90°	18.0	0.4
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°	4342.0	100.0
0°-180°	4342.0	100.0



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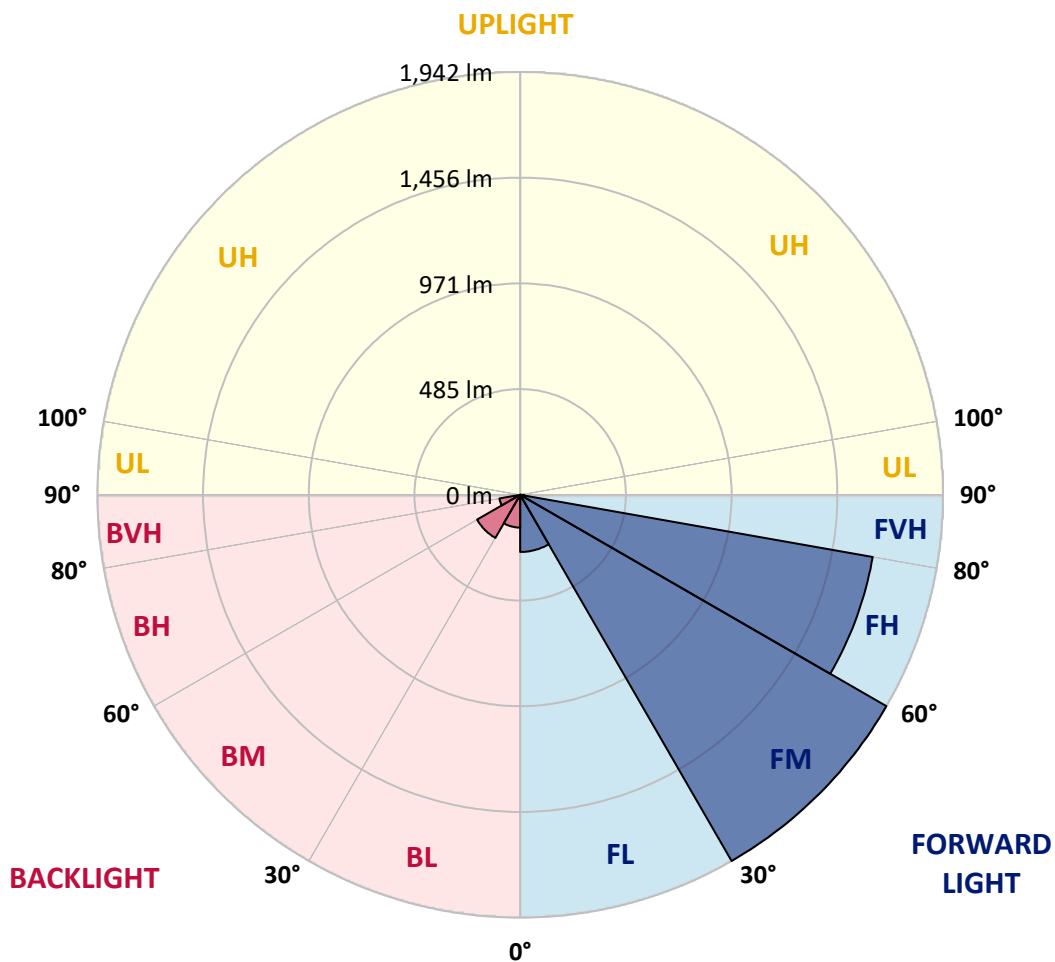
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	262.4	6.0			
FM	(30°-60°)	1941.7	44.7			
FH	(60°-80°)	1644.0	37.9			G1/1800
FVH	(80°-90°)	17.7	0.4			G1/100
BL	(0°-30°)	150.5	3.5	B1/500		
BM	(30°-60°)	228.4	5.3	B1/1000		
BH	(60°-80°)	97.0	2.2	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: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9
2.5°	503.8	506.1	507.7	508.8	510.0	512.7	513.5	514.7	515.3	515.3	516.8
5°	483.9	486.4	489.9	492.7	498.5	505.9	511.2	513.3	517.0	520.3	522.1
7.5°	465.4	468.3	472.4	479.2	489.0	501.0	512.0	514.9	522.1	529.1	532.6
10°	453.5	455.8	461.1	470.8	483.7	500.3	515.9	519.4	531.8	543.5	550.0
12.5°	449.4	451.5	457.0	467.9	483.9	503.4	525.0	530.1	548.2	565.2	574.5
15°	455.4	455.8	461.7	472.0	487.8	511.0	540.0	546.1	568.9	591.1	602.6
17.5°	478.4	476.5	479.6	484.1	496.6	521.1	555.8	565.0	595.4	621.5	632.4
20°	535.9	535.9	528.9	516.6	516.8	536.7	577.1	587.6	624.8	654.9	664.8
22.5°	634.2	632.4	618.4	588.2	560.5	563.6	603.2	616.8	660.1	692.3	695.6
25°	752.5	750.2	728.6	686.1	638.1	607.1	638.5	654.1	702.2	730.7	723.9
27.5°	877.7	875.9	854.5	801.7	733.4	676.5	680.6	695.4	745.1	773.2	751.6
30°	999.0	999.7	978.5	924.3	846.9	765.0	734.0	742.6	786.7	815.3	784.5
32.5°	1114.4	1115.2	1097.0	1036.4	964.1	867.8	807.9	805.6	835.2	863.3	828.0
35°	1217.3	1219.3	1206.8	1159.8	1083.2	982.4	903.8	898.4	904.0	935.8	894.7
37.5°	1316.4	1317.7	1308.2	1268.6	1204.6	1108.3	1024.9	1017.3	1005.4	1029.8	982.8
40°	1425.1	1422.0	1411.1	1375.2	1320.1	1247.3	1155.1	1141.9	1121.2	1143.0	1098.6
42.5°	1526.1	1522.6	1524.4	1483.8	1437.4	1390.2	1306.8	1284.2	1272.1	1297.1	1240.7
45°	1652.3	1650.5	1656.6	1621.3	1583.8	1549.5	1480.7	1456.1	1450.7	1480.1	1412.5
47.5°	1777.0	1781.5	1800.6	1785.6	1770.4	1740.2	1664.9	1653.8	1657.1	1692.6	1593.8
50°	1880.8	1886.2	1938.5	1955.8	1977.8	1960.1	1884.5	1877.8	1890.7	1922.7	1788.9
52.5°	1956.0	1966.9	2032.0	2111.4	2191.5	2203.4	2128.0	2121.9	2139.3	2144.3	1939.6
55°	2008.1	2017.8	2091.5	2236.9	2399.9	2451.2	2404.4	2380.6	2377.3	2328.6	2098.1
57.5°	2017.4	2016.3	2122.3	2318.0	2563.3	2695.7	2666.2	2642.8	2575.4	2499.0	2279.8
60°	1965.2	1971.2	2094.2	2346.1	2666.0	2880.7	2883.0	2852.6	2747.7	2664.7	2455.9
62.5°	1804.7	1828.9	1953.1	2272.4	2664.7	2955.2	3041.9	3018.7	2893.2	2800.4	2634.5
65°	1544.3	1553.0	1671.4	2019.8	2484.7	2924.0	3185.0	3176.4	3024.4	2932.2	2726.3
67.5°	1127.8	1109.1	1233.5	1590.5	2103.6	2742.1	3287.6	3298.5	3125.6	2959.3	2628.6
68°	1029.2	1034.8	1131.7	1484.4	2003.8	2677.9	3294.4	3311.0	3135.7	2941.7	2575.2
70°	613.5	624.1	710.6	1022.0	1524.4	2314.3	3221.3	3259.3	3075.7	2759.6	2227.4
72.5°	156.7	169.4	251.1	457.4	870.7	1630.6	2719.3	2783.6	2670.5	2238.7	1503.7
75°	64.5	67.8	89.7	150.7	324.4	734.6	1792.4	1929.9	1851.3	1340.3	679.6
77.5°	44.6	46.8	57.7	83.6	140.4	249.0	878.7	978.1	881.2	457.4	148.2
80°	32.0	33.9	41.3	55.6	80.7	88.9	286.4	331.2	263.0	100.4	36.8
82.5°	19.1	20.5	30.8	39.6	49.1	42.5	71.2	80.9	76.2	49.9	16.4
85°	9.4	11.1	20.7	28.3	26.5	17.9	21.8	24.2	30.0	30.4	8.8
87.5°	0.6	1.2	12.1	17.0	7.4	4.1	6.4	7.8	10.7	15.0	3.7
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°	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9	515.9
2.5°	517.4	517.6	516.1	515.5	515.9	513.5	512.5	512.9	512.9	513.5	512.5
5°	522.5	522.5	520.1	516.8	514.9	510.2	507.1	506.3	505.7	505.3	504.4
7.5°	533.6	532.4	528.1	520.9	514.7	504.4	496.6	492.5	490.5	489.7	489.0
10°	551.5	549.2	542.0	528.7	514.5	496.2	479.2	467.1	457.0	452.9	450.5
12.5°	575.5	572.2	560.1	537.9	513.1	479.4	442.4	406.9	373.9	360.3	353.5
15°	603.2	598.5	579.4	545.7	504.7	441.4	361.1	298.9	253.1	235.9	228.5
17.5°	631.3	625.2	596.2	550.6	479.4	362.8	253.4	191.3	160.8	152.5	149.7
20°	659.7	650.6	610.8	546.9	422.3	261.6	167.1	139.8	131.0	128.5	127.7
22.5°	686.6	672.6	623.9	532.6	334.5	175.5	132.2	123.6	120.7	119.3	118.9
25°	710.0	690.5	635.4	488.2	236.7	132.6	119.1	116.2	112.5	109.8	110.0
27.5°	731.9	708.3	642.4	415.1	157.9	113.3	110.3	106.4	99.6	95.7	95.7
30°	758.4	732.1	647.5	319.5	116.2	100.2	97.7	91.8	82.5	77.4	77.4
32.5°	798.2	768.3	644.3	224.2	96.3	88.1	82.3	74.1	64.1	59.1	58.9
35°	859.2	824.1	620.9	147.0	85.0	76.6	67.3	57.3	48.5	44.3	44.1
37.5°	941.3	898.8	568.3	105.1	76.2	65.9	54.8	43.7	37.2	34.5	34.3
40°	1047.9	985.7	493.2	85.2	68.0	55.6	42.3	33.9	29.4	27.3	27.5
42.5°	1175.8	1078.7	403.0	73.5	60.0	45.8	33.1	26.7	23.8	22.4	22.0
45°	1317.9	1170.5	308.6	65.5	51.9	37.0	25.9	21.1	18.9	18.1	18.1
47.5°	1474.1	1259.8	225.8	58.5	43.3	28.5	20.7	17.2	15.4	14.8	14.6
50°	1616.0	1321.8	162.8	51.1	35.5	22.6	16.8	14.4	13.1	12.3	12.3
52.5°	1734.3	1341.3	119.9	43.1	28.7	18.1	14.0	12.3	11.1	10.5	10.5
55°	1838.3	1333.3	89.1	35.5	23.2	14.8	11.9	10.5	9.4	8.8	8.8
57.5°	1938.1	1307.4	66.5	28.9	18.7	11.9	10.1	8.8	7.8	7.4	7.4
60°	2019.6	1264.3	49.5	23.4	15.0	9.6	8.4	7.2	6.4	5.7	5.7
62.5°	2085.7	1216.7	36.3	19.3	11.9	7.6	6.6	6.0	4.7	4.1	4.1
65°	2086.2	1137.6	27.3	16.0	9.2	6.0	4.9	4.7	3.1	2.5	2.3
67.5°	1935.3	980.8	20.9	13.8	7.2	4.5	3.7	3.9	1.6	1.0	0.8
68°	1880.4	940.9	19.7	13.6	6.8	4.3	3.5	3.9	1.4	0.8	0.6
70°	1585.4	748.6	15.8	13.1	6.0	3.3	2.9	3.9	1.2	0.6	0.4
72.5°	1014.0	434.4	11.7	10.5	4.5	2.5	1.8	3.5	1.2	0.4	0.2
75°	431.6	134.7	8.0	7.4	2.7	1.8	1.2	2.3	0.8	0.2	0.0
77.5°	91.0	30.4	4.7	4.5	1.8	1.2	0.8	0.6	0.2	0.0	0.0
80°	23.4	8.8	2.5	2.3	1.0	0.6	0.4	0.0	0.0	0.0	0.0
82.5°	7.4	3.5	1.4	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	2.1	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.6	0.2	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)