

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: P348887

Luminaire Tested: **ARCH-N-PA1-40-750-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348887  
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-PA1-40-750-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3929 lumens  
Efficiency: N/A  
Efficacy: 95.8 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 - G2

Input Watts (W): 41  
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

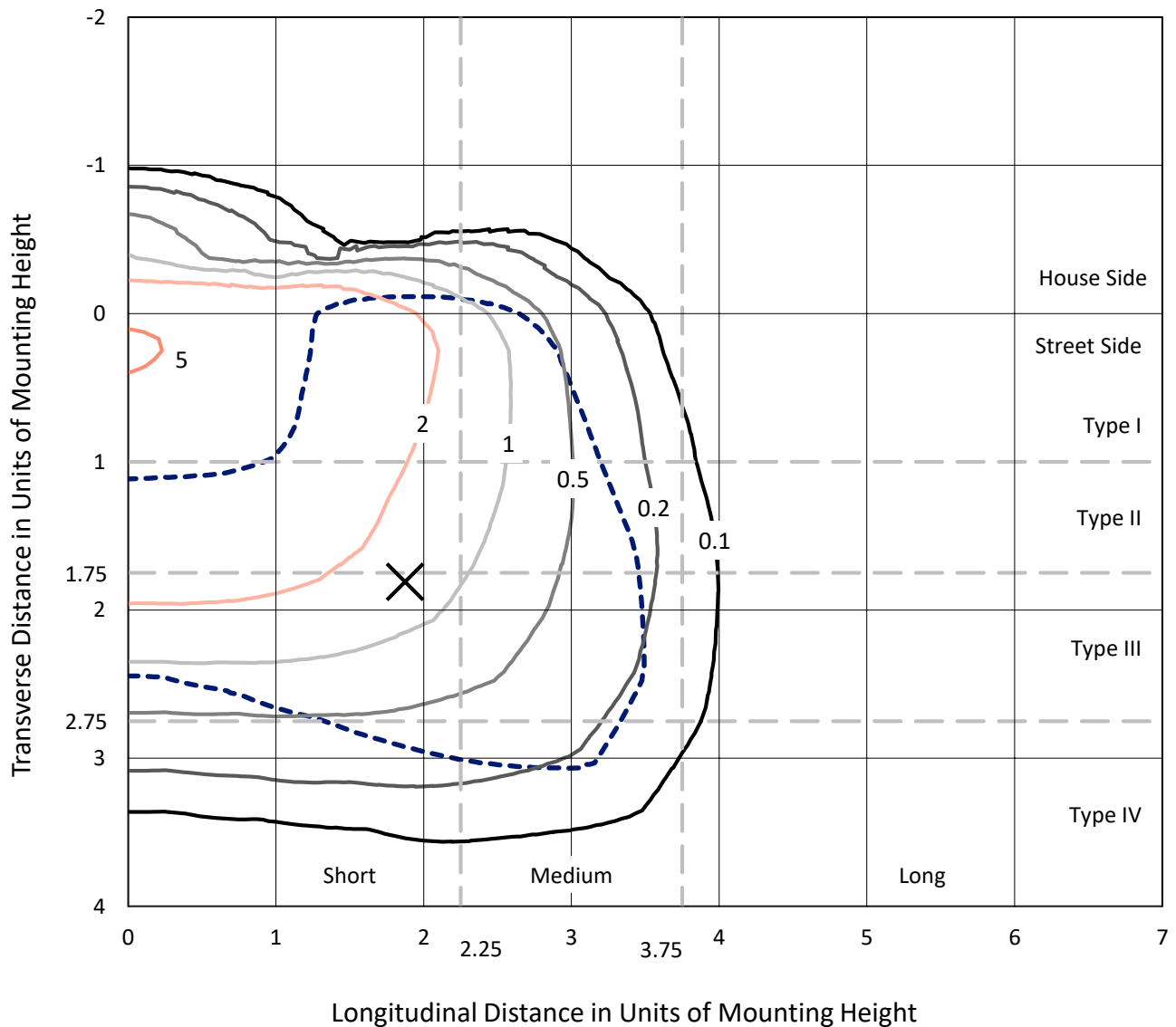


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

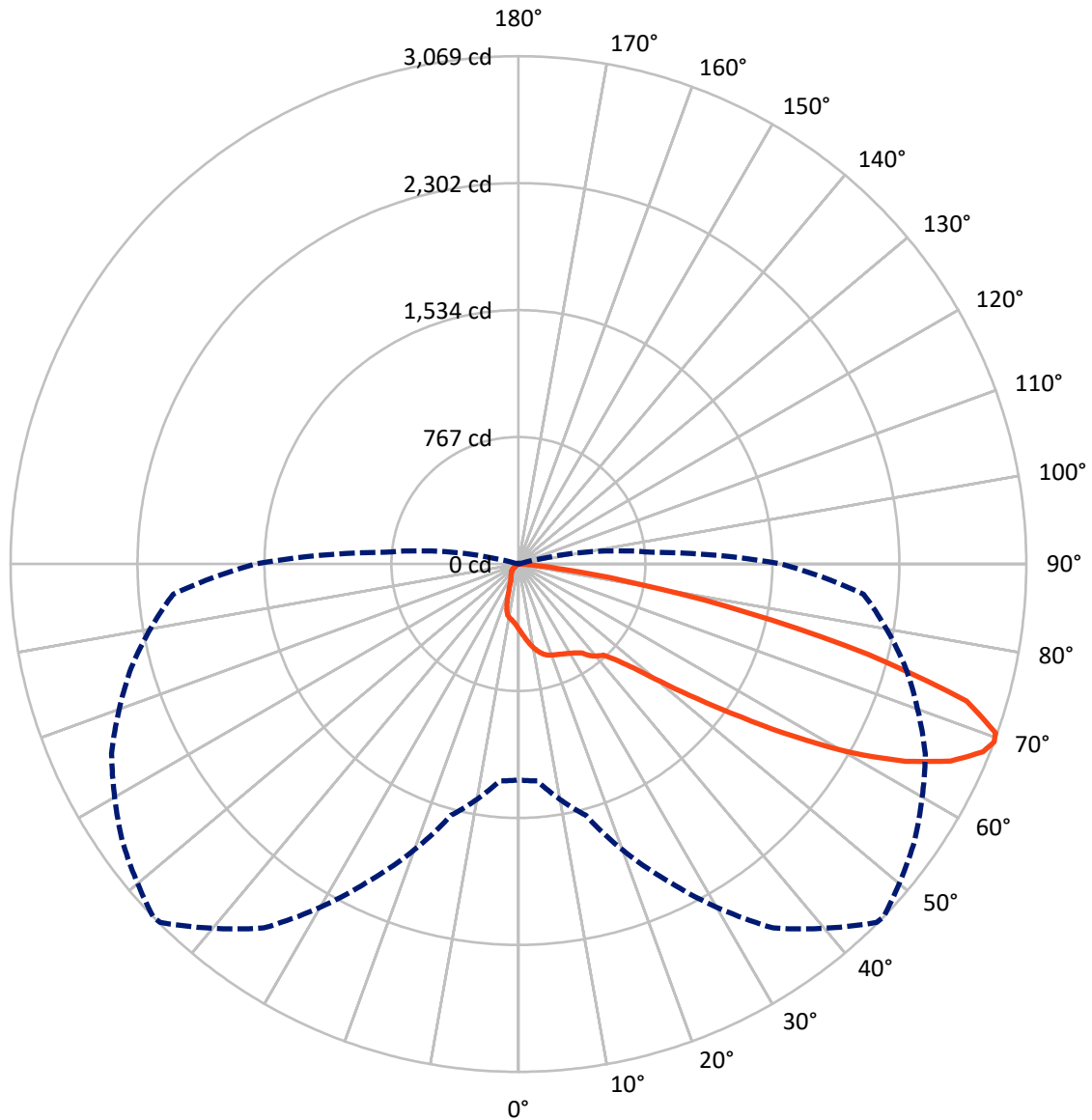


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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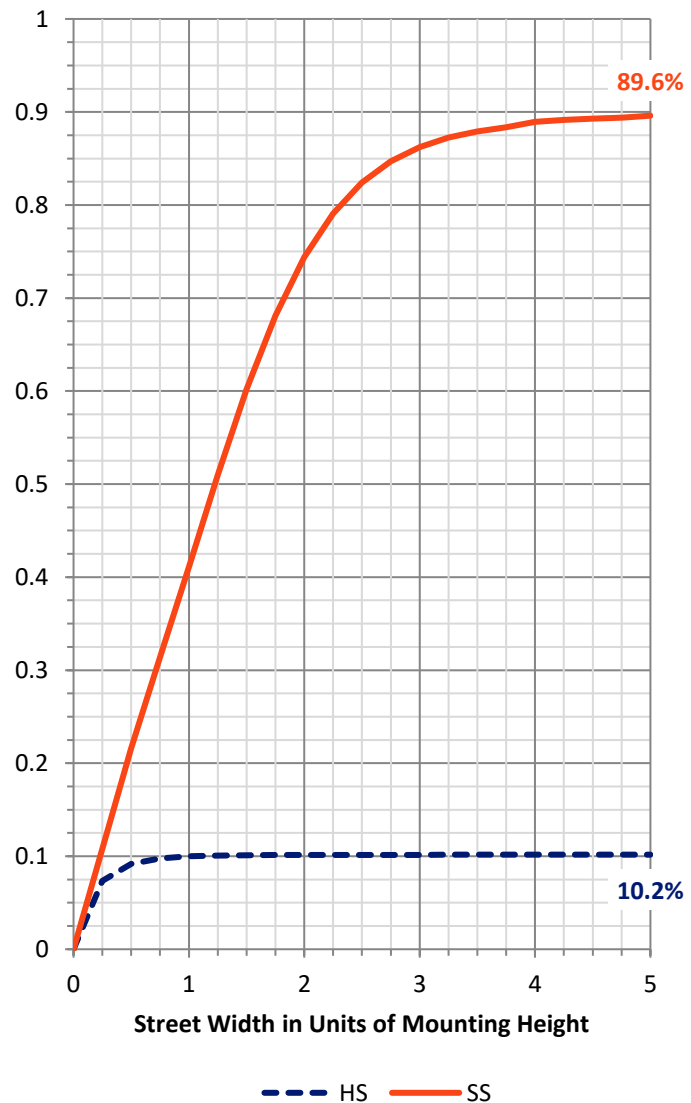
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	403.2	0.0	403.2
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	3525.8	0.0	3525.8
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	3929.0	0.0	3929.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.2	1.0
10°-20°	118.9	3.0
20°-30°	187.0	4.8
30°-40°	268.1	6.8
40°-50°	463.4	11.8
50°-60°	915.4	23.3
60°-70°	1279.4	32.6
70°-80°	618.1	15.7
80°-90°	39.7	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°	3929.0	100.0
0°-180°	3929.0	100.0



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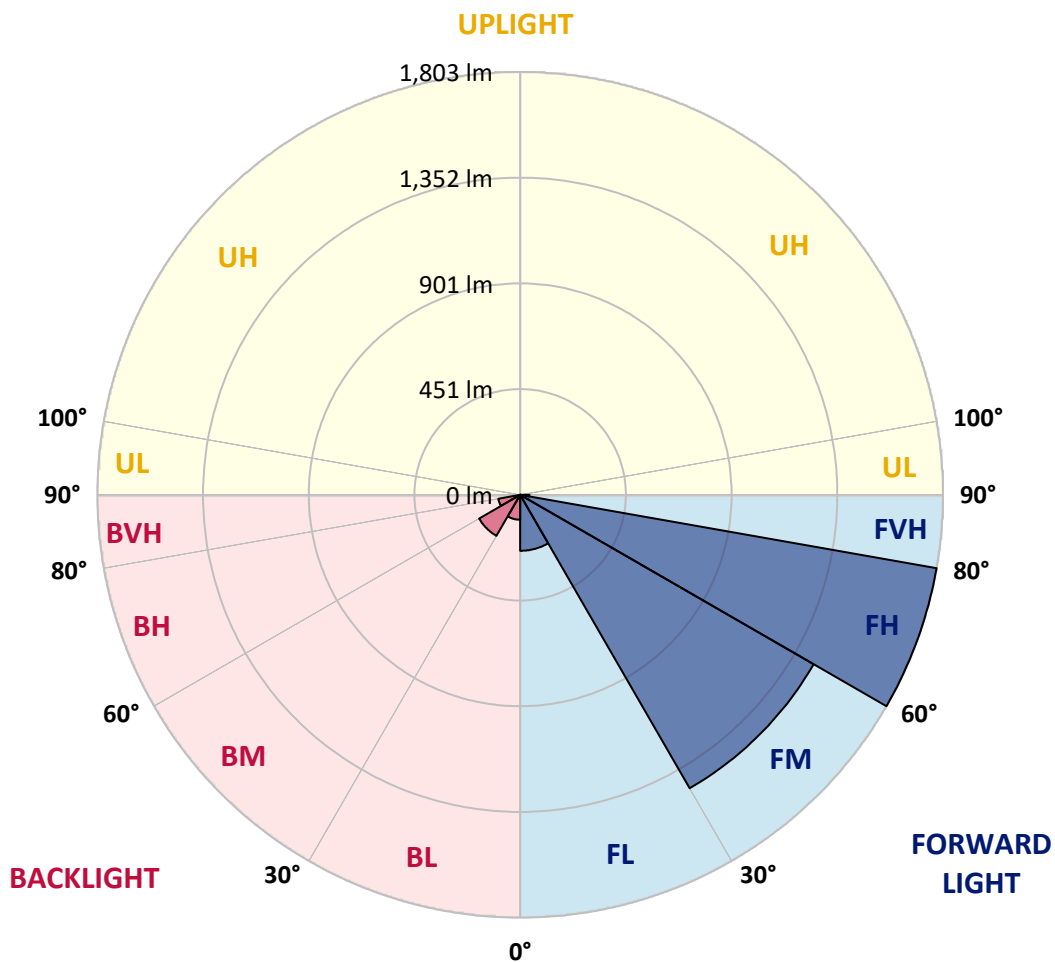
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	238.7	6.1			
FM	(30°-60°)	1444.8	36.8			
FH	(60°-80°)	1802.9	45.9			G2/5000
FVH	(80°-90°)	39.4	1.0			G1/100
BL	(0°-30°)	106.3	2.7	B0/110		
BM	(30°-60°)	202.1	5.1	B0/220		
BH	(60°-80°)	94.5	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-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7
2.5°	437.3	436.8	434.2	433.1	426.8	423.1	421.7	417.1	410.4	403.8	396.4
5°	487.1	486.9	482.1	477.5	465.7	454.6	452.6	441.9	427.0	413.0	399.0
7.5°	537.9	535.5	530.7	521.9	504.8	487.1	485.4	470.3	449.1	428.9	408.8
10°	581.0	579.5	573.3	559.8	539.8	519.7	517.6	499.0	475.1	450.2	424.6
12.5°	614.5	613.4	605.2	588.4	567.0	546.2	543.4	526.9	501.3	473.4	443.2
15°	635.0	634.4	624.3	606.4	585.4	567.4	565.0	550.4	526.7	497.6	463.5
17.5°	639.8	640.0	629.5	611.4	594.1	581.2	579.4	568.3	548.4	519.5	483.8
20°	629.1	631.3	621.9	606.3	595.6	588.8	587.3	580.7	563.9	536.6	500.0
22.5°	614.0	615.1	608.7	598.2	593.7	595.0	594.3	590.6	576.4	551.4	516.0
25°	604.8	604.8	600.9	592.1	595.0	602.9	603.1	602.4	591.2	569.4	535.5
27.5°	604.4	603.3	598.9	592.3	600.4	612.5	613.3	618.2	611.2	591.3	559.8
30°	619.2	617.9	608.5	599.8	610.1	623.2	625.0	635.9	632.4	615.1	586.9
32.5°	653.6	649.0	628.2	614.0	621.7	637.4	639.8	657.1	662.6	644.4	613.1
35°	700.8	686.2	656.2	640.9	641.6	658.0	660.2	685.7	702.0	671.3	633.3
37.5°	765.8	758.6	709.8	668.9	672.2	697.1	703.5	731.2	726.6	686.0	656.4
40°	908.4	897.1	845.2	747.4	701.5	728.8	730.8	745.5	745.9	719.4	704.3
42.5°	1102.5	1097.9	1043.2	889.8	759.2	749.9	753.6	778.5	806.3	789.7	789.0
45°	1317.5	1315.1	1257.1	1078.8	875.8	819.4	824.0	857.3	910.6	914.3	937.7
47.5°	1490.5	1489.4	1456.0	1289.7	1054.3	937.1	938.6	974.0	1067.5	1113.8	1151.2
50°	1648.2	1653.5	1627.2	1517.9	1297.4	1121.5	1118.0	1141.6	1291.9	1367.6	1414.0
52.5°	1867.4	1875.0	1801.1	1730.9	1552.6	1350.3	1347.5	1372.2	1561.6	1618.3	1626.6
55°	2061.0	2048.1	1989.7	1969.5	1863.7	1632.9	1632.2	1653.9	1822.5	1846.6	1861.9
57.5°	2146.5	2141.5	2169.7	2216.1	2189.6	1966.9	1965.2	1948.6	2055.9	2058.4	2105.4
60°	2200.5	2206.5	2292.9	2436.1	2502.2	2326.3	2315.6	2214.5	2278.8	2273.1	2323.3
62.5°	2159.9	2171.9	2327.4	2566.0	2736.2	2640.0	2624.9	2458.0	2469.2	2449.5	2496.3
65°	1944.8	1963.4	2218.2	2541.5	2852.2	2885.2	2869.9	2673.0	2620.5	2588.1	2562.1
67.5°	1579.1	1590.2	1856.2	2328.3	2799.9	3031.5	3028.3	2861.4	2734.7	2564.7	2363.1
69°	1305.0	1315.9	1571.9	2103.9	2684.8	3062.8	3068.9	2921.9	2713.0	2422.4	2093.8
70°	1105.3	1116.9	1355.5	1911.6	2551.2	3048.2	3059.1	2916.2	2650.7	2257.8	1857.5
72.5°	579.7	589.7	834.5	1317.0	2079.8	2799.0	2832.0	2669.7	2246.9	1639.7	1098.3
75°	182.2	187.9	325.9	688.4	1424.0	2176.3	2183.9	2094.2	1595.5	901.9	457.4
77.5°	69.4	67.8	108.5	253.7	719.9	1370.4	1416.6	1308.7	837.3	318.9	105.6
80°	37.4	37.6	56.4	105.0	308.0	704.3	743.3	634.3	297.5	99.5	24.3
82.5°	16.2	16.9	31.7	55.6	141.5	259.7	279.3	232.5	113.7	66.9	9.0
85°	3.5	3.9	15.3	30.2	57.7	72.9	76.4	75.3	72.4	51.9	3.5
87.5°	0.0	0.0	6.8	10.9	14.6	16.6	14.6	19.0	40.0	35.0	1.8
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°	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7	393.7
2.5°	394.0	390.7	385.0	378.7	374.3	369.7	366.0	364.4	362.5	361.2	362.9
5°	393.3	386.9	375.8	365.1	357.4	351.1	346.0	343.9	341.9	340.4	340.2
7.5°	399.8	390.7	373.8	358.1	346.1	337.7	330.7	327.7	325.3	324.2	323.3
10°	412.1	400.5	377.8	357.4	341.9	327.5	312.4	300.8	293.3	289.8	288.5
12.5°	428.1	413.6	385.6	361.2	338.8	311.1	279.1	251.5	233.6	227.7	224.2
15°	446.9	428.9	395.7	366.2	327.4	276.9	222.5	186.4	169.8	166.5	162.8
17.5°	465.0	445.1	407.9	367.1	302.3	221.2	163.0	138.5	132.1	134.3	134.8
20°	480.8	461.1	419.8	359.0	256.8	166.0	126.2	120.1	122.5	126.7	127.5
22.5°	496.8	476.6	430.9	337.7	198.6	126.0	113.7	115.1	117.5	121.8	122.5
25°	516.4	495.4	441.2	298.4	149.0	107.2	108.0	110.2	112.6	116.4	116.8
27.5°	538.8	519.1	448.0	247.4	110.5	98.6	101.0	104.3	106.7	110.3	111.1
30°	568.7	550.4	450.2	194.5	92.7	90.8	91.9	96.0	99.5	102.8	103.3
32.5°	596.7	581.4	442.9	146.8	85.8	83.6	83.6	86.0	90.1	93.2	94.0
35°	622.5	612.5	419.3	107.4	80.7	77.0	75.2	75.2	77.7	80.3	81.1
37.5°	656.5	656.2	381.1	85.7	75.7	71.5	67.6	64.7	63.7	64.3	64.7
40°	714.9	715.5	331.4	76.8	71.5	65.8	59.9	54.5	49.6	47.9	47.7
42.5°	806.1	797.8	279.3	72.6	67.8	59.9	51.0	43.8	36.1	33.7	33.5
45°	950.9	901.7	224.0	68.7	63.9	53.2	42.2	32.4	26.2	24.3	24.3
47.5°	1161.9	1038.2	173.5	64.5	58.8	45.7	31.9	23.4	19.2	18.2	18.4
50°	1380.0	1172.0	133.0	59.1	52.5	37.8	23.6	16.9	14.6	14.6	14.7
52.5°	1573.4	1270.0	103.7	53.4	44.8	29.7	17.9	13.3	12.2	12.0	12.2
55°	1754.5	1333.2	79.4	46.8	35.6	22.1	13.6	10.9	10.1	9.8	9.6
57.5°	1929.1	1364.5	59.5	37.8	25.8	16.0	10.9	9.2	8.5	7.9	7.7
60°	2045.4	1339.1	40.9	27.8	17.9	11.6	9.0	7.9	7.0	6.4	6.3
62.5°	2110.9	1269.6	26.3	20.1	12.7	8.7	7.2	6.6	5.3	4.8	4.8
65°	2084.4	1155.0	18.4	14.4	9.2	6.4	5.3	5.3	3.9	3.1	2.9
67.5°	1847.1	975.8	14.0	10.7	6.6	4.8	4.1	4.6	2.4	1.5	1.5
69°	1589.2	808.7	12.0	8.8	5.5	3.9	3.5	4.2	1.7	1.1	0.9
70°	1381.3	697.6	10.9	7.7	4.6	3.3	3.1	4.1	1.7	0.9	0.7
72.5°	826.4	389.1	8.3	5.5	2.9	2.6	2.6	4.6	1.7	0.9	0.7
75°	334.0	137.1	6.1	3.9	2.2	2.2	3.1	5.9	1.5	0.7	0.6
77.5°	75.7	30.0	3.5	2.4	1.5	2.2	3.7	4.6	0.9	0.4	0.0
80°	18.4	7.4	2.2	1.5	0.9	1.7	2.8	2.6	0.2	0.0	0.0
82.5°	6.1	2.6	0.9	0.7	0.2	0.6	1.3	0.7	0.0	0.0	0.0
85°	2.6	1.5	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
87.5°	1.7	0.6	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)