

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: P348901

Luminaire Tested: **ARCH-N-PA1-40-827-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348901  
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-PA1-40-827-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2888 lumens  
Efficiency: N/A  
Efficacy: 70.4 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

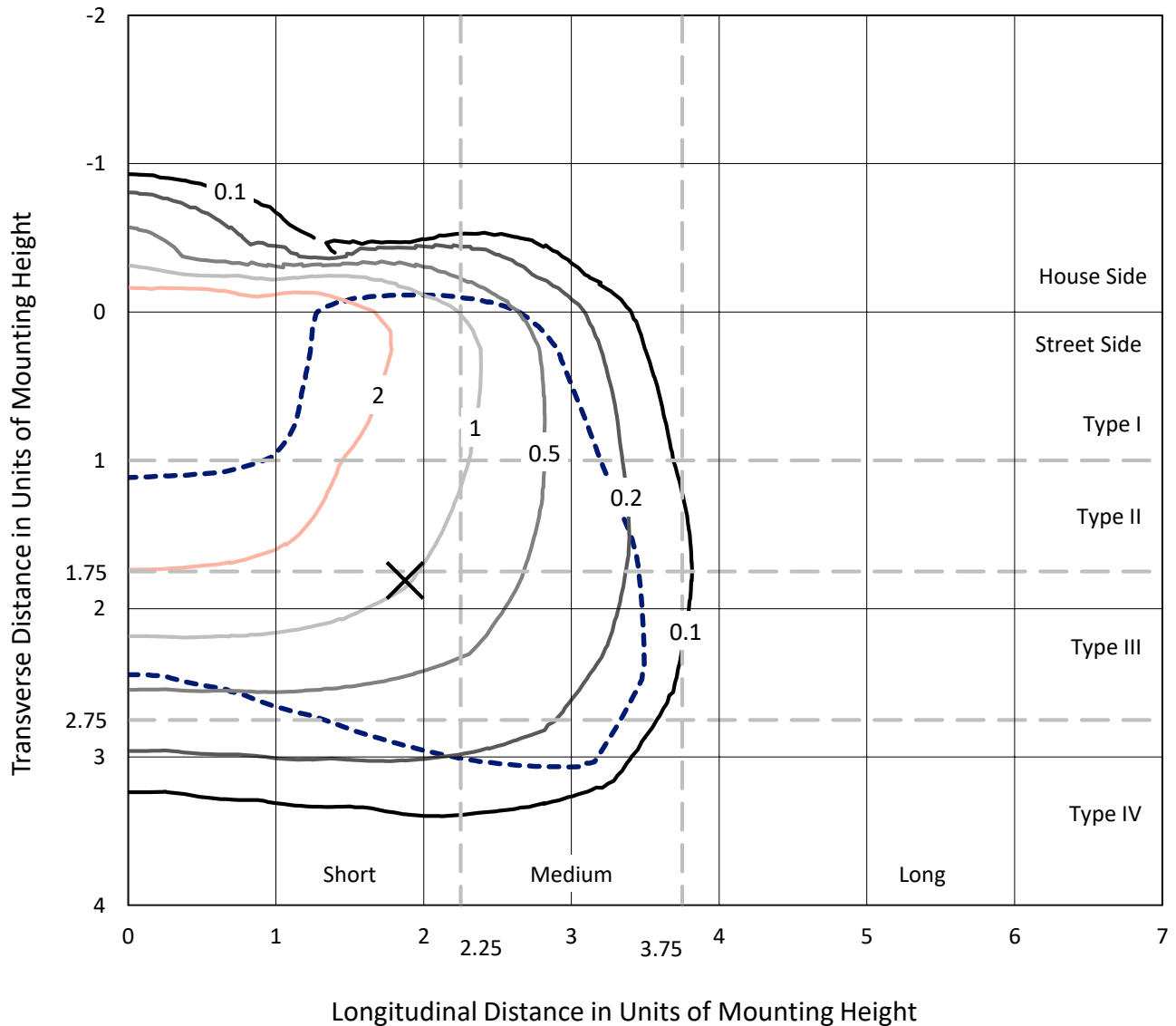
Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

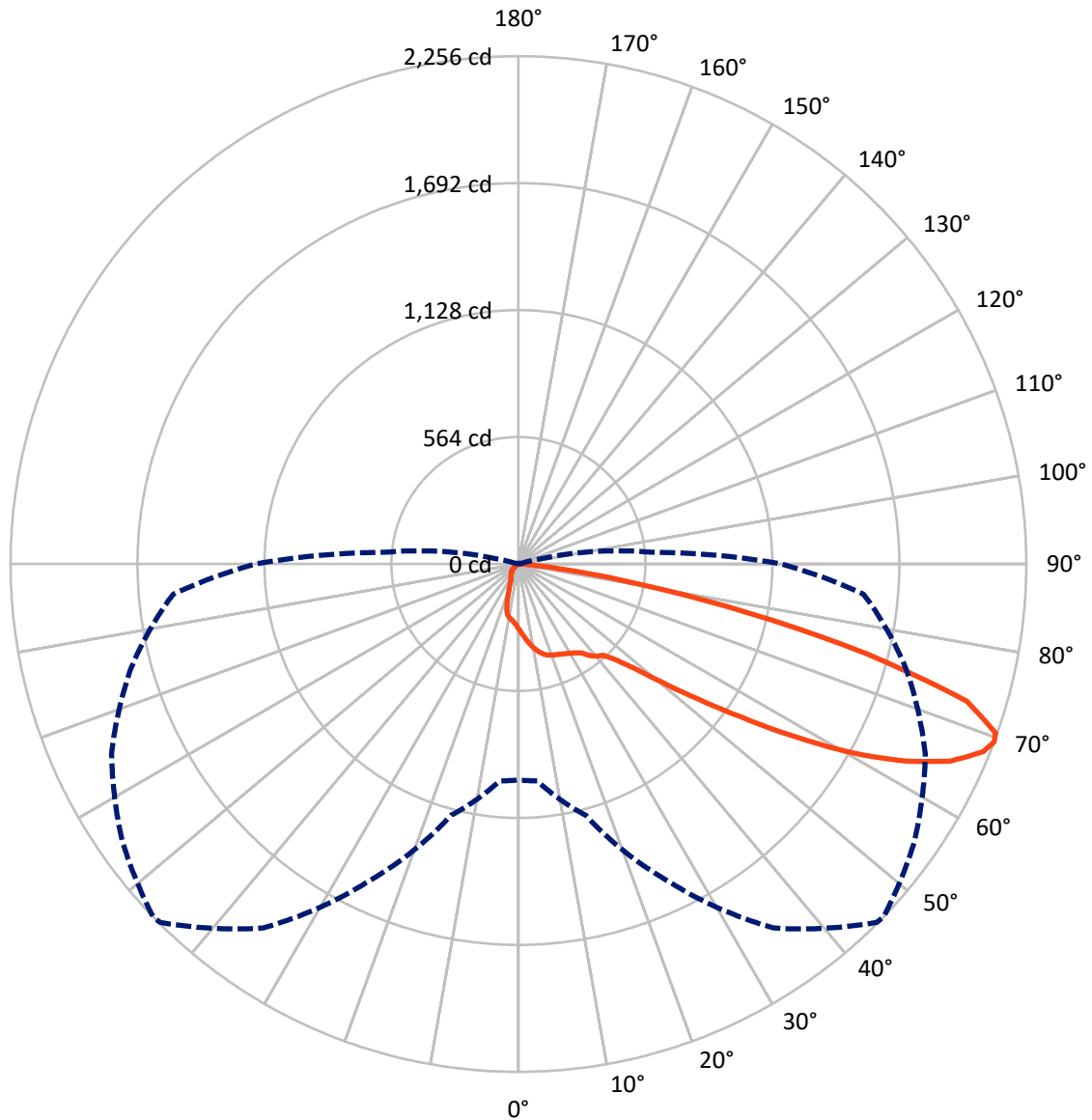


Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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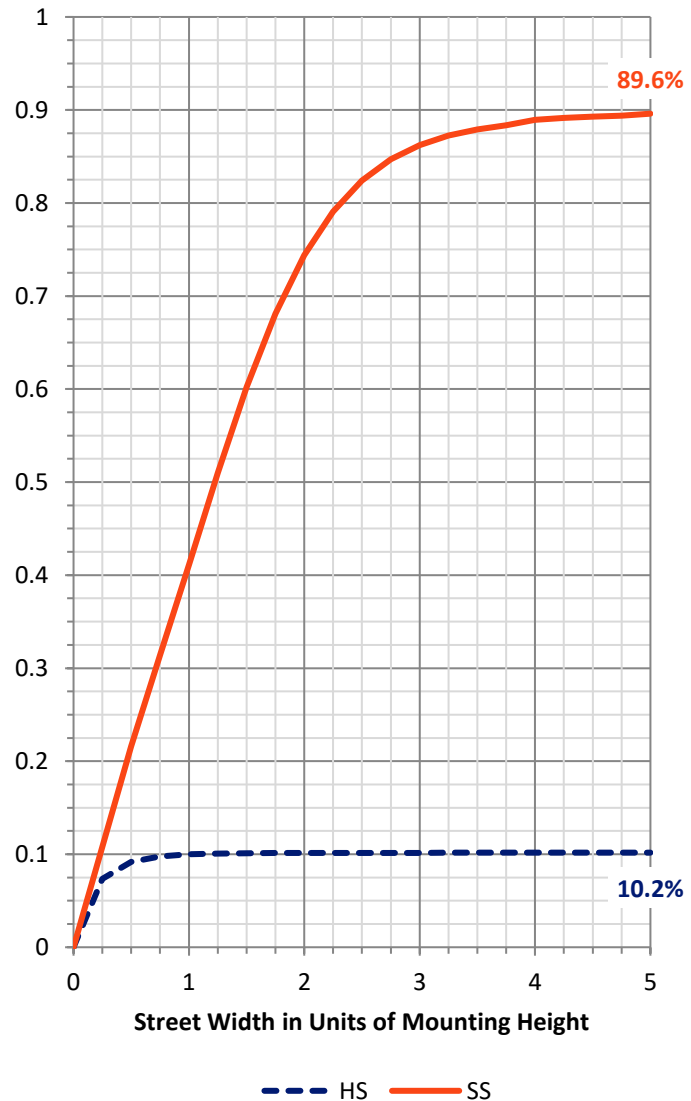
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	296.4	0.0	296.4
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	2591.6	0.0	2591.6
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	2888.0	0.0	2888.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.8	1.0
10°-20°	87.4	3.0
20°-30°	137.4	4.8
30°-40°	197.1	6.8
40°-50°	340.6	11.8
50°-60°	672.9	23.3
60°-70°	940.4	32.6
70°-80°	454.3	15.7
80°-90°	29.2	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°	2888.0	100.0
0°-180°	2888.0	100.0

**Coefficient of Utilization**



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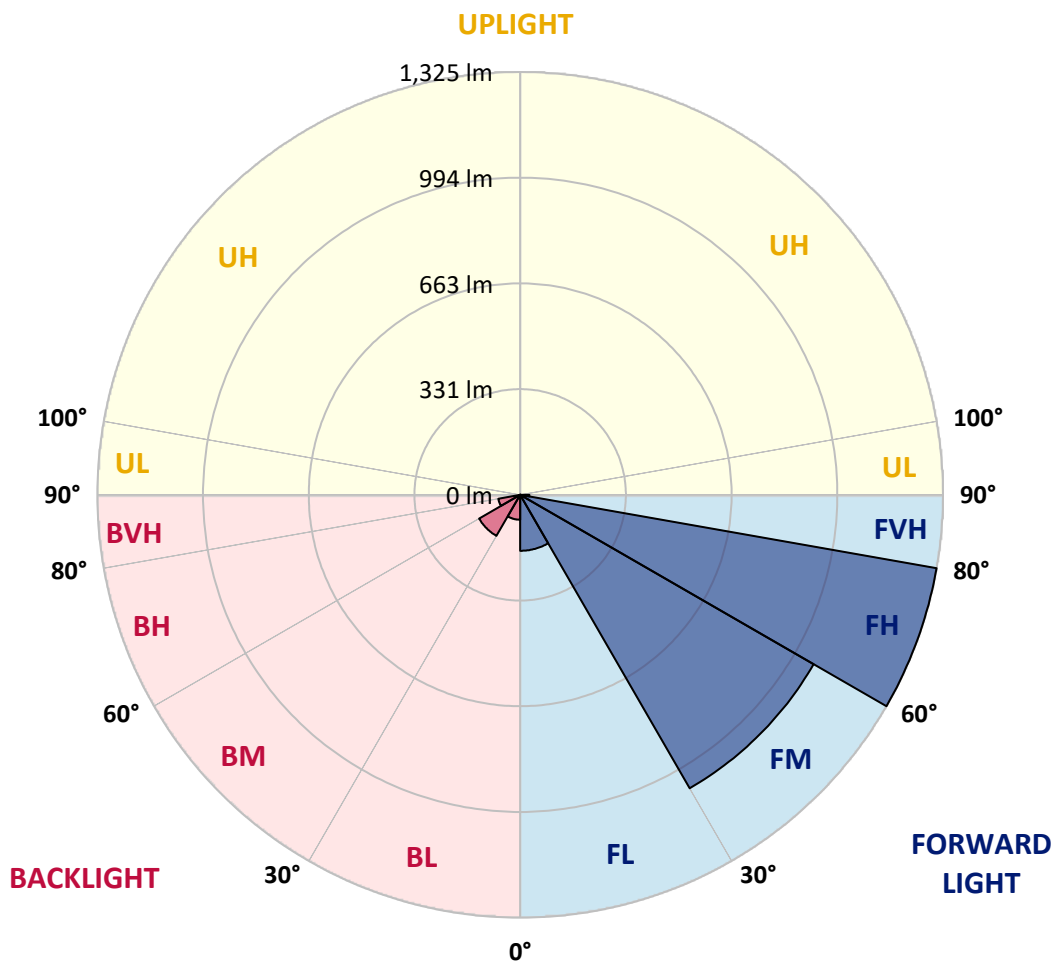
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	175.5	6.1			
FM	(30°-60°)	1062.0	36.8			
FH	(60°-80°)	1325.2	45.9			G1/1800
FVH	(80°-90°)	29.0	1.0			G1/100
BL	(0°-30°)	78.1	2.7	B0/110		
BM	(30°-60°)	148.5	5.1	B0/220		
BH	(60°-80°)	69.5	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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°	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4
2.5°	321.5	321.1	319.2	318.3	313.7	311.0	309.9	306.6	301.7	296.8	291.4
5°	358.0	357.9	354.4	351.0	342.3	334.2	332.7	324.8	313.9	303.6	293.3
7.5°	395.4	393.6	390.1	383.6	371.0	358.0	356.8	345.7	330.1	315.2	300.5
10°	427.1	426.0	421.4	411.5	396.7	382.0	380.5	366.8	349.2	330.9	312.1
12.5°	451.7	450.9	444.8	432.5	416.8	401.5	399.5	387.3	368.4	348.0	325.8
15°	466.8	466.3	458.9	445.8	430.3	417.1	415.3	404.6	387.1	365.7	340.7
17.5°	470.3	470.4	462.7	449.4	436.7	427.2	425.9	417.7	403.1	381.9	355.6
20°	462.4	464.0	457.1	445.6	437.8	432.8	431.7	426.8	414.5	394.4	367.5
22.5°	451.3	452.1	447.4	439.7	436.4	437.4	436.8	434.1	423.7	405.3	379.3
25°	444.5	444.5	441.7	435.2	437.4	443.2	443.3	442.8	434.5	418.5	393.6
27.5°	444.3	443.5	440.2	435.3	441.3	450.2	450.8	454.4	449.3	434.7	411.5
30°	455.1	454.2	447.3	440.9	448.5	458.1	459.4	467.4	464.9	452.1	431.4
32.5°	480.4	477.0	461.7	451.3	457.0	468.5	470.3	483.0	487.1	473.7	450.6
35°	515.1	504.4	482.3	471.1	471.6	483.7	485.3	504.0	516.0	493.4	465.5
37.5°	562.9	557.6	521.7	491.7	494.1	512.4	517.1	537.4	534.0	504.3	482.5
40°	667.7	659.4	621.3	549.4	515.6	535.7	537.2	548.0	548.3	528.8	517.7
42.5°	810.4	807.0	766.8	654.0	558.0	551.2	554.0	572.2	592.7	580.5	580.0
45°	968.4	966.7	924.0	792.9	643.7	602.3	605.7	630.2	669.3	672.0	689.2
47.5°	1095.6	1094.8	1070.3	948.0	774.9	688.8	689.9	715.9	784.7	818.7	846.2
50°	1211.5	1215.4	1196.1	1115.8	953.7	824.4	821.8	839.1	949.6	1005.3	1039.4
52.5°	1372.6	1378.2	1323.9	1272.3	1141.2	992.5	990.5	1008.7	1147.9	1189.6	1195.7
55°	1514.9	1505.5	1462.5	1447.6	1369.9	1200.3	1199.7	1215.7	1339.6	1357.3	1368.6
57.5°	1577.8	1574.1	1594.8	1629.0	1609.5	1445.8	1444.5	1432.3	1511.2	1513.0	1547.6
60°	1617.4	1621.9	1685.4	1790.6	1839.2	1709.9	1702.1	1627.7	1675.0	1670.8	1707.8
62.5°	1587.7	1596.5	1710.7	1886.1	2011.2	1940.5	1929.4	1806.7	1815.0	1800.5	1834.9
65°	1429.5	1443.2	1630.4	1868.1	2096.5	2120.8	2109.5	1964.8	1926.2	1902.3	1883.3
67.5°	1160.7	1168.8	1364.4	1711.4	2058.1	2228.3	2226.0	2103.3	2010.1	1885.1	1737.0
69°	959.2	967.2	1155.4	1546.5	1973.4	2251.3	2255.8	2147.7	1994.2	1780.6	1539.0
70°	812.4	821.0	996.3	1405.1	1875.3	2240.6	2248.6	2143.5	1948.4	1659.6	1365.3
72.5°	426.1	433.4	613.4	968.0	1528.8	2057.4	2081.6	1962.3	1651.6	1205.3	807.3
75°	133.9	138.1	239.5	506.0	1046.7	1599.7	1605.3	1539.3	1172.8	663.0	336.2
77.5°	51.0	49.8	79.8	186.5	529.2	1007.3	1041.3	961.9	615.4	234.4	77.6
80°	27.5	27.6	41.4	77.2	226.4	517.7	546.4	466.2	218.7	73.1	17.9
82.5°	11.9	12.5	23.3	40.9	104.0	190.9	205.3	170.9	83.5	49.2	6.6
85°	2.6	2.8	11.2	22.2	42.4	53.6	56.2	55.4	53.2	38.2	2.6
87.5°	0.0	0.0	5.0	8.0	10.7	12.2	10.7	13.9	29.4	25.7	1.4
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°	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4	289.4
2.5°	289.6	287.2	283.0	278.4	275.1	271.8	269.1	267.8	266.5	265.5	266.8
5°	289.1	284.4	276.2	268.4	262.7	258.1	254.3	252.8	251.3	250.2	250.1
7.5°	293.8	287.2	274.7	263.2	254.4	248.2	243.1	240.9	239.1	238.3	237.6
10°	302.9	294.4	277.7	262.7	251.3	240.8	229.7	221.1	215.6	213.0	212.0
12.5°	314.7	304.0	283.4	265.5	249.0	228.7	205.1	184.8	171.7	167.4	164.8
15°	328.5	315.2	290.9	269.2	240.6	203.5	163.6	137.0	124.8	122.4	119.7
17.5°	341.8	327.1	299.8	269.9	222.2	162.6	119.8	101.8	97.1	98.7	99.1
20°	353.4	338.9	308.6	263.9	188.8	122.0	92.8	88.3	90.0	93.2	93.7
22.5°	365.2	350.3	316.7	248.2	146.0	92.6	83.5	84.6	86.4	89.5	90.0
25°	379.5	364.1	324.3	219.4	109.5	78.8	79.3	81.0	82.7	85.6	85.8
27.5°	396.1	381.6	329.3	181.9	81.2	72.4	74.2	76.6	78.4	81.1	81.7
30°	418.0	404.6	330.9	143.0	68.1	66.8	67.6	70.5	73.1	75.6	76.0
32.5°	438.6	427.3	325.5	107.9	63.1	61.5	61.5	63.2	66.2	68.5	69.1
35°	457.5	450.2	308.2	78.9	59.3	56.6	55.2	55.2	57.1	59.0	59.6
37.5°	482.6	482.3	280.2	63.0	55.7	52.5	49.7	47.5	46.9	47.3	47.5
40°	525.5	525.9	243.6	56.5	52.5	48.3	44.0	40.1	36.4	35.2	35.1
42.5°	592.5	586.5	205.3	53.4	49.8	44.0	37.5	32.2	26.5	24.8	24.6
45°	699.0	662.8	164.7	50.5	47.0	39.1	31.0	23.8	19.2	17.9	17.9
47.5°	854.0	763.2	127.6	47.4	43.2	33.6	23.4	17.2	14.1	13.4	13.5
50°	1014.3	861.5	97.8	43.5	38.6	27.8	17.3	12.5	10.7	10.7	10.8
52.5°	1156.5	933.5	76.2	39.3	32.9	21.8	13.1	9.7	8.9	8.8	8.9
55°	1289.6	979.9	58.4	34.4	26.1	16.2	10.0	8.0	7.4	7.2	7.0
57.5°	1418.0	1003.0	43.7	27.8	19.0	11.8	8.0	6.8	6.2	5.8	5.7
60°	1503.4	984.3	30.1	20.4	13.1	8.5	6.6	5.8	5.1	4.7	4.6
62.5°	1551.6	933.2	19.4	14.8	9.3	6.4	5.3	4.9	3.9	3.5	3.5
65°	1532.1	849.0	13.5	10.6	6.8	4.7	3.9	3.9	2.8	2.3	2.2
67.5°	1357.7	717.3	10.3	7.9	4.9	3.5	3.0	3.4	1.8	1.1	1.1
69°	1168.2	594.4	8.8	6.5	4.1	2.8	2.6	3.1	1.2	0.8	0.7
70°	1015.3	512.8	8.0	5.7	3.4	2.4	2.3	3.0	1.2	0.7	0.5
72.5°	607.4	286.0	6.1	4.1	2.2	1.9	1.9	3.4	1.2	0.7	0.5
75°	245.5	100.7	4.5	2.8	1.6	1.6	2.3	4.3	1.1	0.5	0.4
77.5°	55.7	22.1	2.6	1.8	1.1	1.6	2.7	3.4	0.7	0.3	0.0
80°	13.5	5.4	1.6	1.1	0.7	1.2	2.0	1.9	0.1	0.0	0.0
82.5°	4.5	1.9	0.7	0.5	0.1	0.4	0.9	0.5	0.0	0.0	0.0
85°	1.9	1.1	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	1.2	0.4	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)