

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: P265928

Luminaire Tested: **ARCH-AF24-30-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265928  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-30-D-U-T3-7027-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 375mA 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: 2480.2 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 31  
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

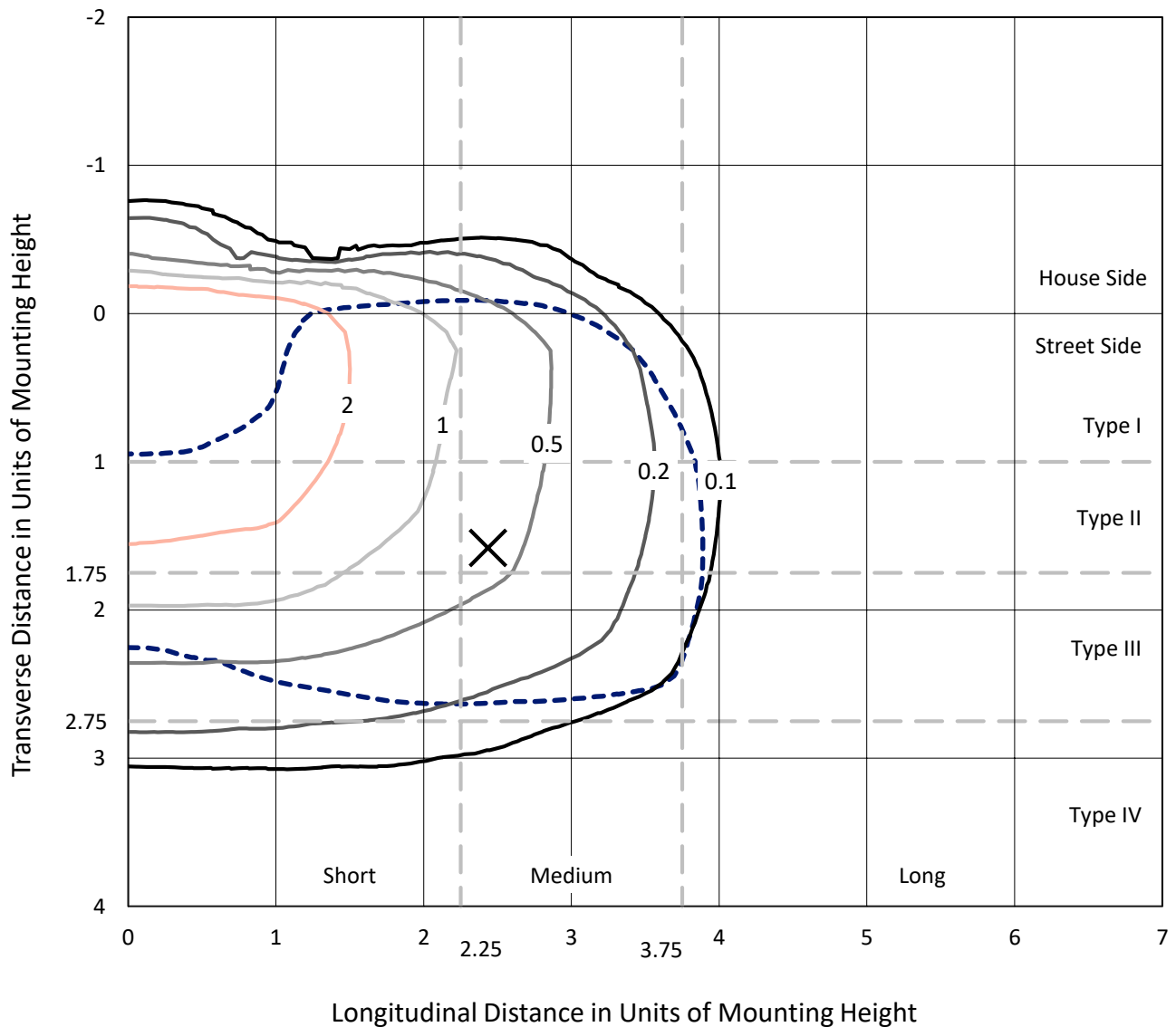


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

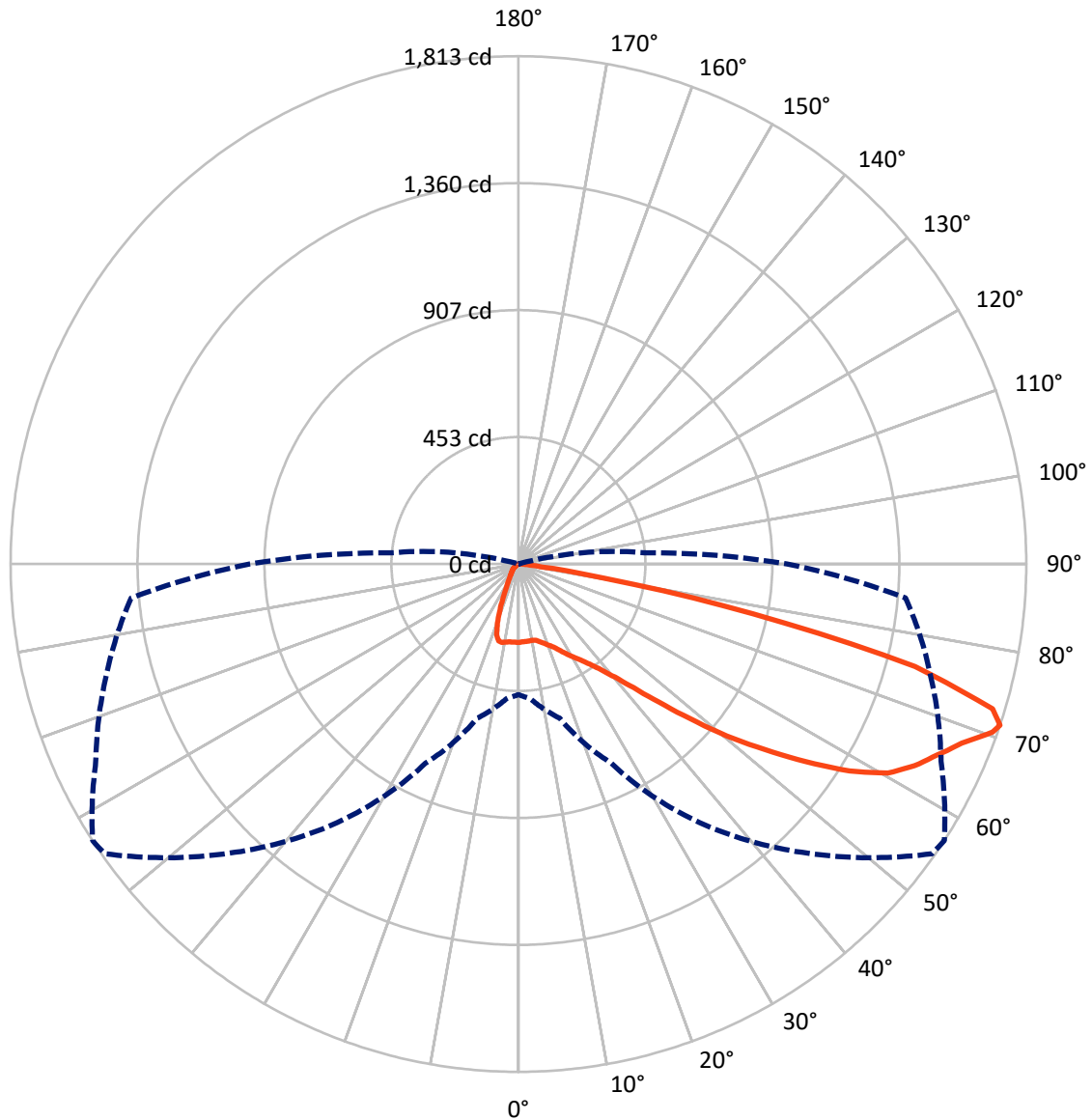


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical



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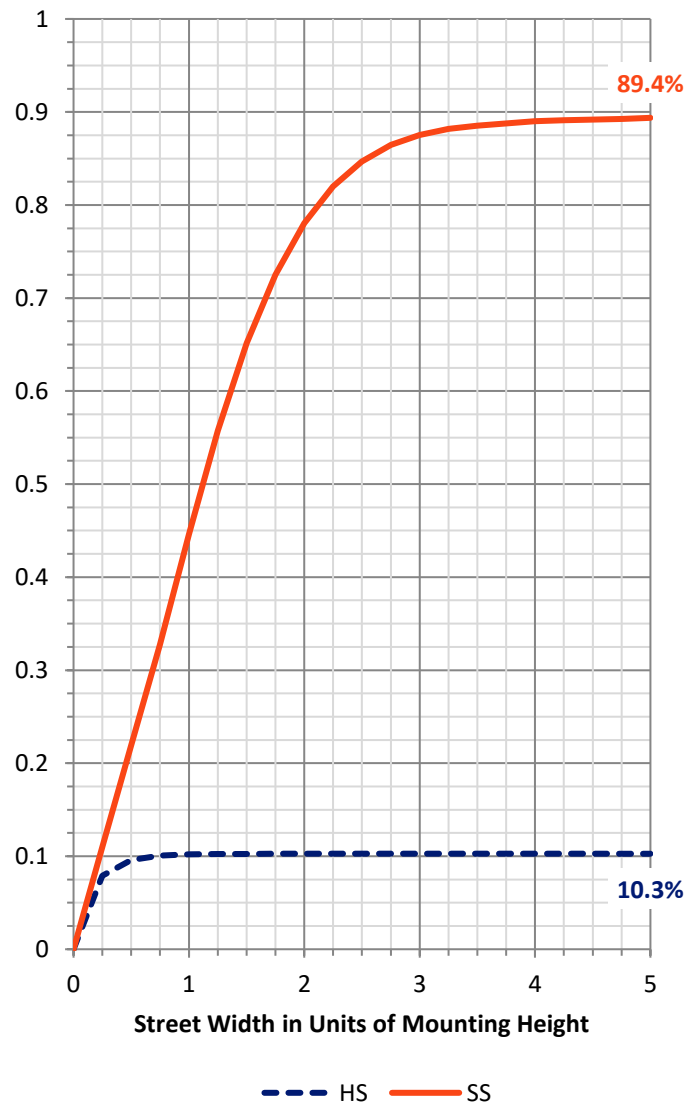
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	257.0	0.0	257.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	2223.2	0.0	2223.2
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	2480.2	0.0	2480.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.3	1.1
10°-20°	70.4	2.8
20°-30°	109.8	4.4
30°-40°	185.6	7.5
40°-50°	360.4	14.5
50°-60°	605.3	24.4
60°-70°	722.4	29.1
70°-80°	380.7	15.3
80°-90°	19.4	0.8
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°	2480.2	100.0
0°-180°	2480.2	100.0

**Coefficient of Utilization**



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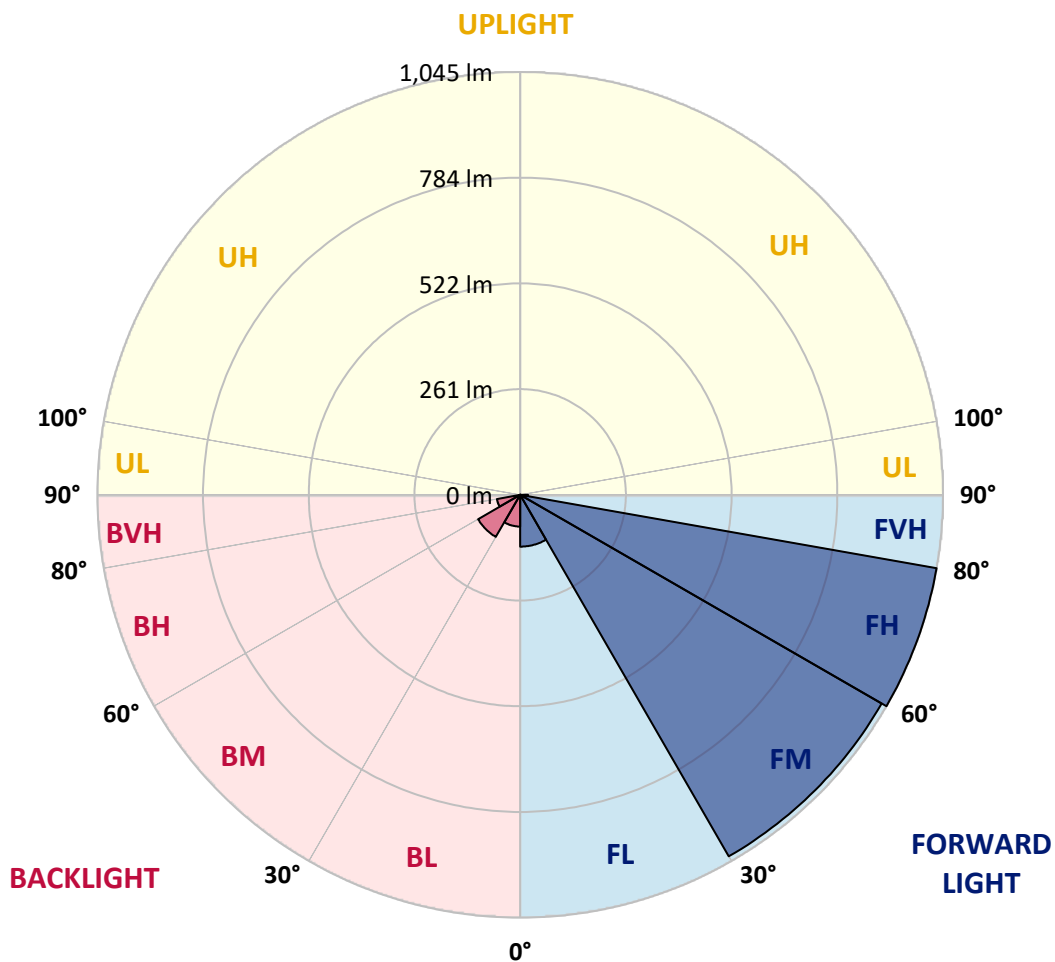
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	128.0	5.2			
FM	(30°-60°)	1031.3	41.6			
FH	(60°-80°)	1044.7	42.1			G1/1800
FVH	(80°-90°)	19.2	0.8			G1/100
BL	(0°-30°)	78.5	3.2	B0/110		
BM	(30°-60°)	120.0	4.8	B0/220		
BH	(60°-30°)	58.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4
2.5°	276.3	276.3	276.3	276.9	277.3	277.3	278.6	277.9	277.9	277.9	279.2
5°	268.8	269.3	269.9	271.1	273.4	275.2	277.9	277.9	278.6	279.7	280.4
7.5°	258.4	258.9	260.7	262.9	267.5	271.6	276.3	277.3	279.2	282.1	283.1
10°	252.0	253.1	255.5	258.4	263.6	268.8	274.5	276.3	281.4	286.6	289.6
12.5°	250.3	250.8	253.1	257.8	264.1	270.5	277.9	279.7	287.3	295.4	299.9
15°	253.1	253.7	254.8	260.1	267.5	275.7	285.5	287.7	297.1	306.3	312.2
17.5°	258.4	258.4	259.5	264.1	272.1	281.4	294.1	297.7	308.1	318.4	324.7
20°	261.8	261.8	263.6	268.1	277.3	289.6	304.5	309.1	320.8	332.4	338.1
22.5°	265.3	265.9	267.5	272.7	283.1	299.9	317.3	322.0	335.2	347.4	353.2
25°	275.2	274.5	275.2	279.7	291.9	312.7	334.6	340.4	354.3	367.5	370.5
27.5°	302.3	301.1	293.6	290.7	299.9	325.9	356.5	362.3	378.5	391.8	391.8
30°	364.7	362.3	344.0	320.2	312.7	338.1	377.4	385.6	406.4	417.8	414.4
32.5°	443.9	438.6	414.9	374.6	344.5	354.3	399.3	408.5	435.1	445.0	437.6
35°	530.5	530.0	500.4	448.4	405.8	387.8	427.7	438.6	472.1	480.9	468.7
37.5°	622.4	624.7	605.1	533.5	483.2	442.8	465.2	478.0	519.0	529.5	517.9
40°	724.8	724.2	716.7	631.7	576.3	520.7	519.6	531.1	580.8	597.1	580.8
42.5°	854.2	853.0	825.9	749.5	688.9	622.4	598.7	602.9	658.3	684.9	661.2
45°	986.0	977.8	946.6	880.8	827.0	748.5	703.4	703.4	750.8	787.2	750.2
47.5°	1059.5	1051.2	1038.6	1002.1	986.0	898.1	831.7	823.6	860.5	897.5	845.6
50°	1155.8	1155.8	1124.0	1110.2	1138.0	1076.1	973.3	965.1	983.0	1012.6	944.4
52.5°	1232.1	1218.3	1195.7	1208.0	1287.1	1258.7	1114.8	1099.3	1113.1	1120.6	1030.4
55°	1263.9	1250.7	1249.0	1293.4	1416.0	1376.7	1260.0	1245.9	1245.0	1208.0	1105.6
57.5°	1270.4	1258.7	1280.8	1358.7	1541.3	1473.2	1404.4	1394.0	1361.7	1269.1	1182.4
60°	1216.6	1222.4	1275.6	1394.6	1615.3	1556.9	1526.3	1515.4	1440.8	1321.1	1268.0
62.5°	1106.2	1120.0	1219.4	1398.0	1588.2	1591.1	1594.0	1586.4	1502.1	1368.6	1354.1
65°	975.6	979.6	1099.3	1350.1	1540.9	1580.7	1643.7	1643.1	1548.9	1421.7	1451.2
67.5°	804.0	810.8	914.4	1188.3	1446.0	1576.0	1708.9	1707.1	1602.0	1482.5	1509.1
70°	598.2	606.9	690.6	924.1	1234.5	1518.2	1794.5	1795.6	1658.1	1528.6	1469.1
71°	466.4	482.0	569.9	784.8	1126.5	1459.8	1802.5	1813.0	1664.5	1522.3	1387.1
72.5°	228.9	247.4	357.7	552.5	927.1	1329.2	1749.4	1769.7	1624.6	1443.0	1185.9
75°	59.6	63.1	106.9	226.0	497.0	880.8	1410.8	1462.3	1328.1	1098.6	724.8
77.5°	37.5	38.7	50.2	87.9	186.0	334.6	828.7	854.2	758.9	556.6	255.5
80°	26.6	27.2	31.8	56.7	108.7	97.6	298.1	309.1	274.5	147.4	45.6
82.5°	16.2	16.2	23.1	36.4	67.1	53.2	78.6	83.8	74.0	41.1	15.0
85°	9.3	9.8	14.5	24.9	31.8	26.1	29.5	31.3	31.8	27.2	6.4
87.5°	7.5	8.1	12.8	20.8	17.3	12.8	12.8	13.2	13.8	16.2	2.9
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°	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4
2.5°	279.2	279.2	279.7	279.2	279.2	279.2	279.7	279.7	279.7	280.9	281.4
5°	280.4	280.4	280.4	279.7	279.2	279.2	280.4	280.9	280.9	282.5	282.5
7.5°	283.1	283.1	282.1	280.9	279.7	277.9	278.6	279.2	278.6	279.2	279.2
10°	289.6	289.6	287.7	285.5	282.1	276.9	269.9	261.2	253.1	250.3	249.1
12.5°	299.9	299.3	295.9	291.9	284.4	266.4	240.4	209.8	184.3	177.4	175.1
15°	311.5	310.4	306.3	299.3	279.2	231.8	177.4	138.1	113.8	108.1	106.9
17.5°	323.7	322.0	316.2	302.3	255.5	172.2	114.4	86.6	73.4	72.3	72.9
20°	336.3	334.1	325.9	296.5	206.3	115.1	74.0	67.1	65.8	65.8	66.5
22.5°	350.8	348.0	337.0	275.7	150.2	76.3	63.6	63.1	62.4	61.9	61.9
25°	367.5	364.2	347.4	238.1	103.5	62.4	60.6	59.0	57.9	56.7	56.1
27.5°	387.8	383.1	355.4	191.9	71.1	58.4	57.2	54.3	52.0	49.6	49.6
30°	408.0	402.3	353.2	144.4	57.9	54.3	52.0	48.6	45.0	42.8	42.2
32.5°	429.4	423.6	338.1	97.0	52.6	49.6	46.8	41.6	37.5	34.7	34.0
35°	461.2	456.6	308.6	64.1	47.4	43.9	39.9	34.7	29.5	26.6	26.1
37.5°	508.6	502.8	272.1	49.1	41.6	36.4	33.0	27.2	22.0	19.0	18.4
40°	572.2	554.9	228.9	43.4	36.4	30.1	25.4	19.7	15.6	13.8	13.8
42.5°	646.2	605.1	182.0	39.3	32.3	24.9	18.4	13.2	11.0	10.4	10.4
45°	724.8	651.9	135.3	36.4	28.3	19.7	13.2	9.3	8.1	7.5	7.5
47.5°	805.6	690.1	94.2	33.0	23.6	15.0	9.3	6.9	5.7	5.2	5.2
50°	881.3	715.0	66.5	29.5	20.2	11.0	6.9	5.2	4.0	4.0	4.0
52.5°	934.0	712.5	48.0	25.4	15.6	7.5	4.6	3.5	3.5	3.5	3.5
55°	980.2	703.9	37.5	22.0	12.1	5.2	3.5	2.9	2.9	2.3	2.3
57.5°	1019.4	690.1	31.8	18.0	8.7	4.0	2.3	2.3	1.7	1.7	1.7
60°	1053.1	672.7	26.6	15.0	5.7	2.9	1.7	1.2	1.2	0.5	1.2
62.5°	1098.6	661.7	23.1	11.6	4.0	1.7	1.2	0.5	0.5	0.0	0.0
65°	1132.1	640.9	19.7	8.1	2.3	1.2	0.5	0.5	0.0	0.0	0.0
67.5°	1133.3	603.4	14.5	4.6	1.7	1.2	0.5	0.0	0.0	0.0	0.0
70°	1042.0	514.4	9.3	2.3	1.2	0.5	0.5	0.0	0.0	0.0	0.0
71°	958.2	455.4	7.5	1.7	1.2	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	789.5	334.6	5.7	1.7	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	435.1	121.5	2.9	1.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	139.2	37.0	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	23.6	5.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.1	2.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	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)