

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: P265910

Luminaire Tested: **ARCH-AF16-60-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265910
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-AF16-60-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4183.1 lumens
Efficiency: N/A
Efficacy: 66.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): 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

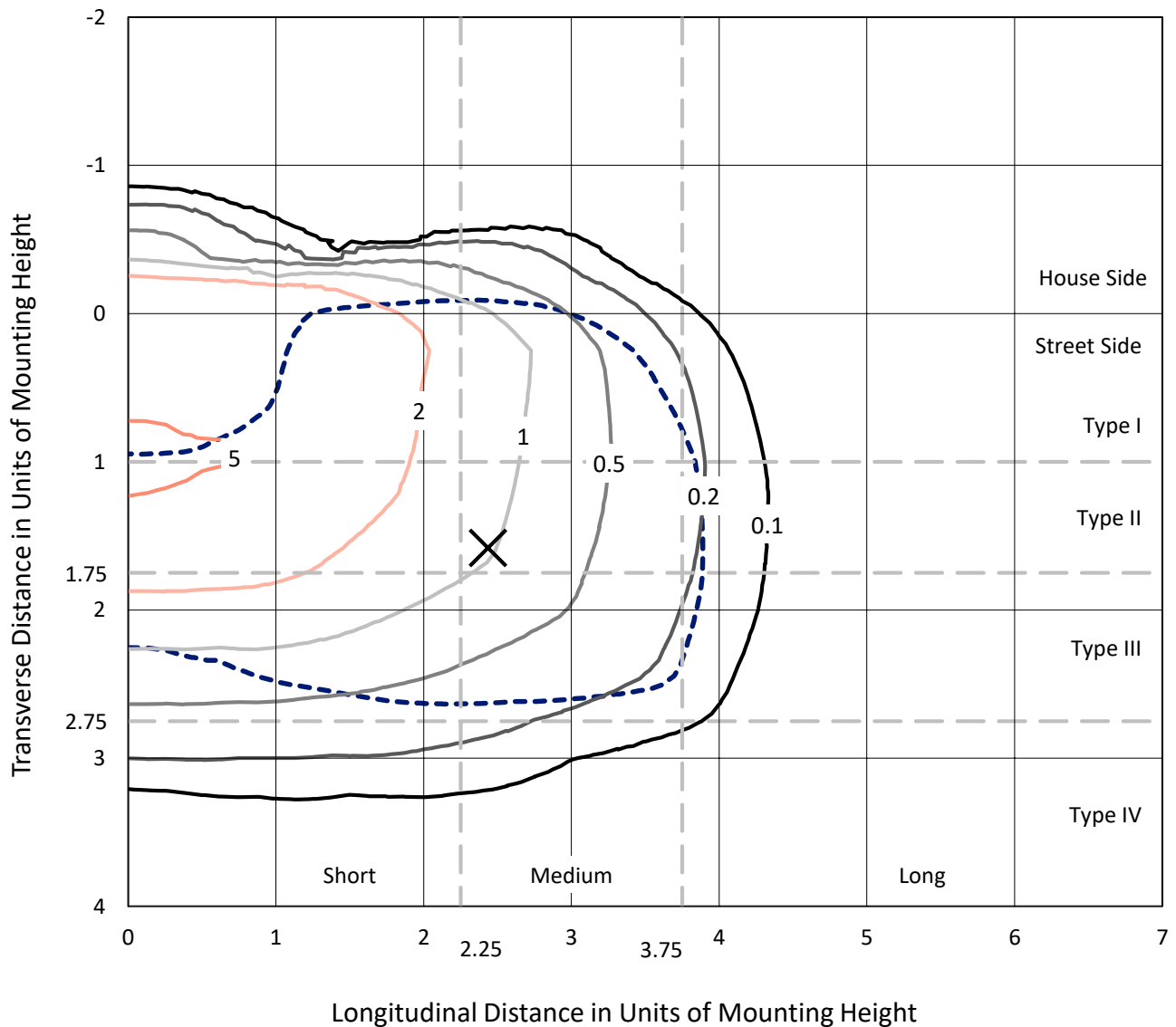


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

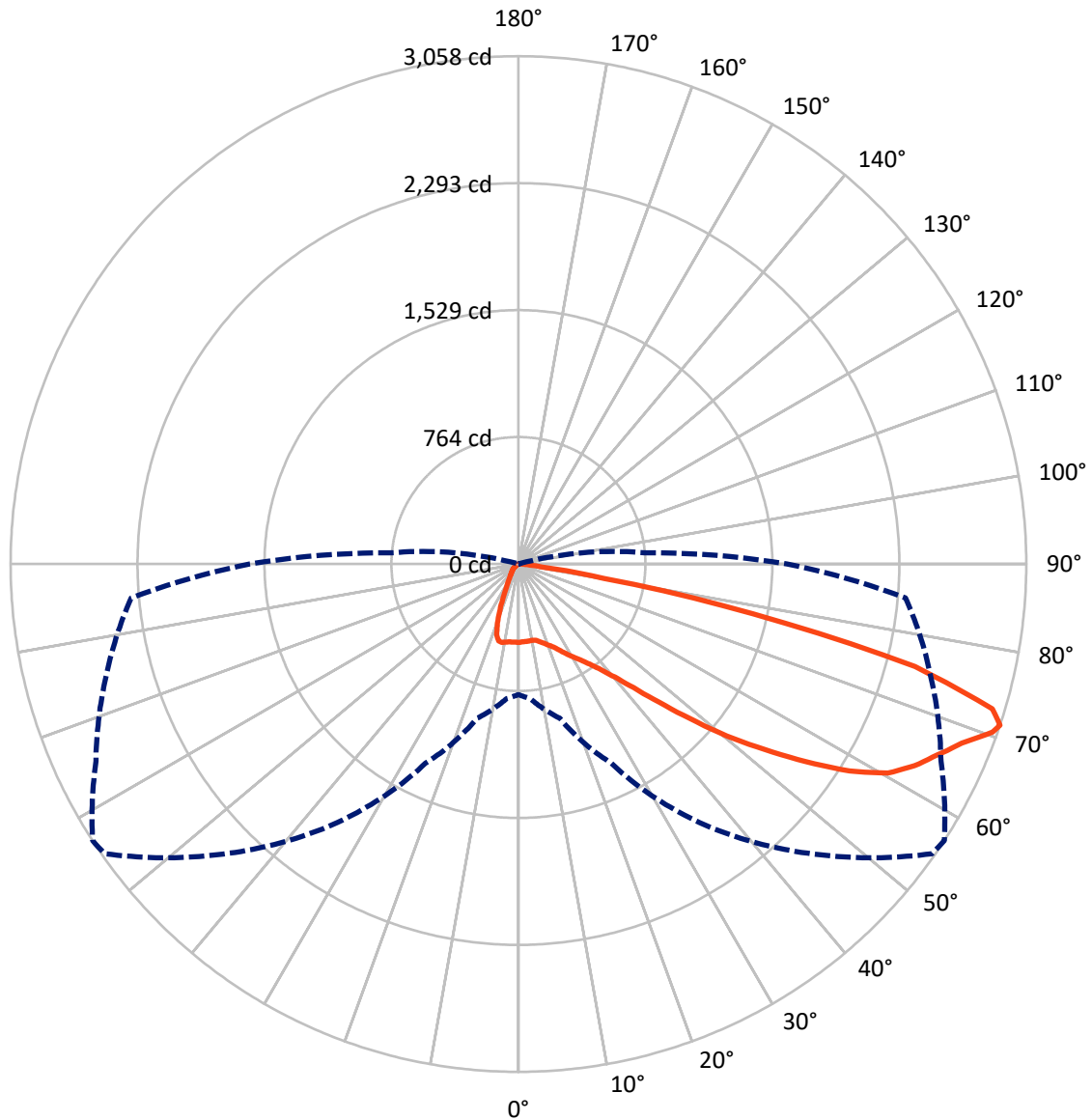


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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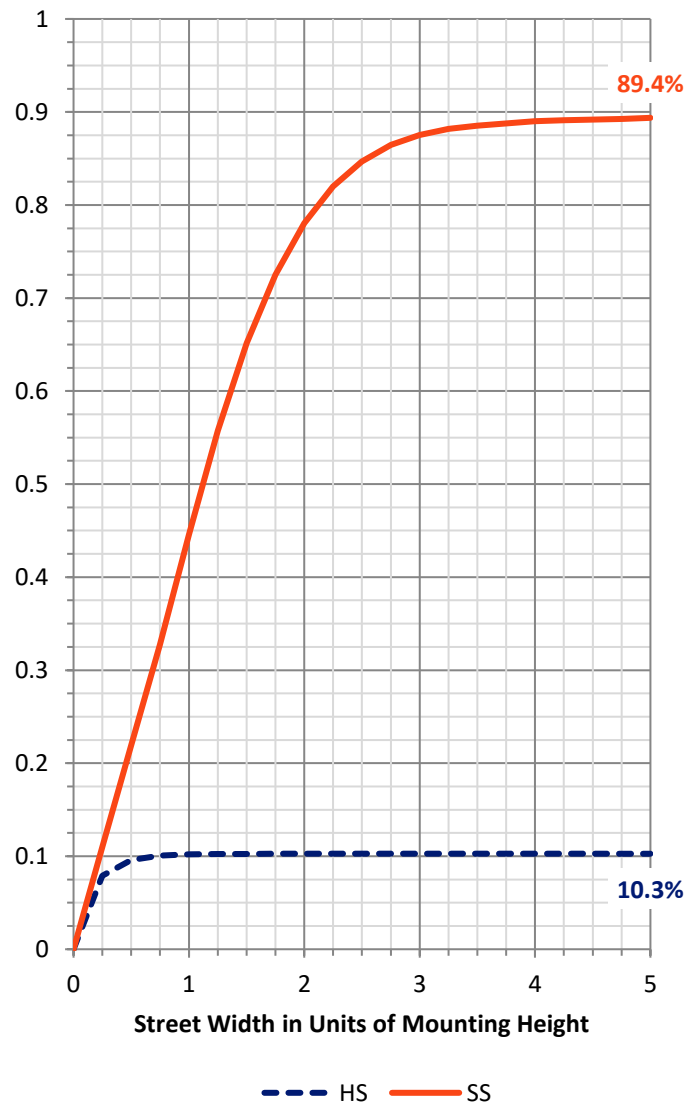
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	433.5	0.0	433.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	3749.6	0.0	3749.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	4183.1	0.0	4183.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	1.1
10°-20°	118.7	2.8
20°-30°	185.2	4.4
30°-40°	313.0	7.5
40°-50°	607.9	14.5
50°-60°	1020.9	24.4
60°-70°	1218.3	29.1
70°-80°	642.1	15.3
80°-90°	32.6	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°	4183.1	100.0
0°-180°	4183.1	100.0



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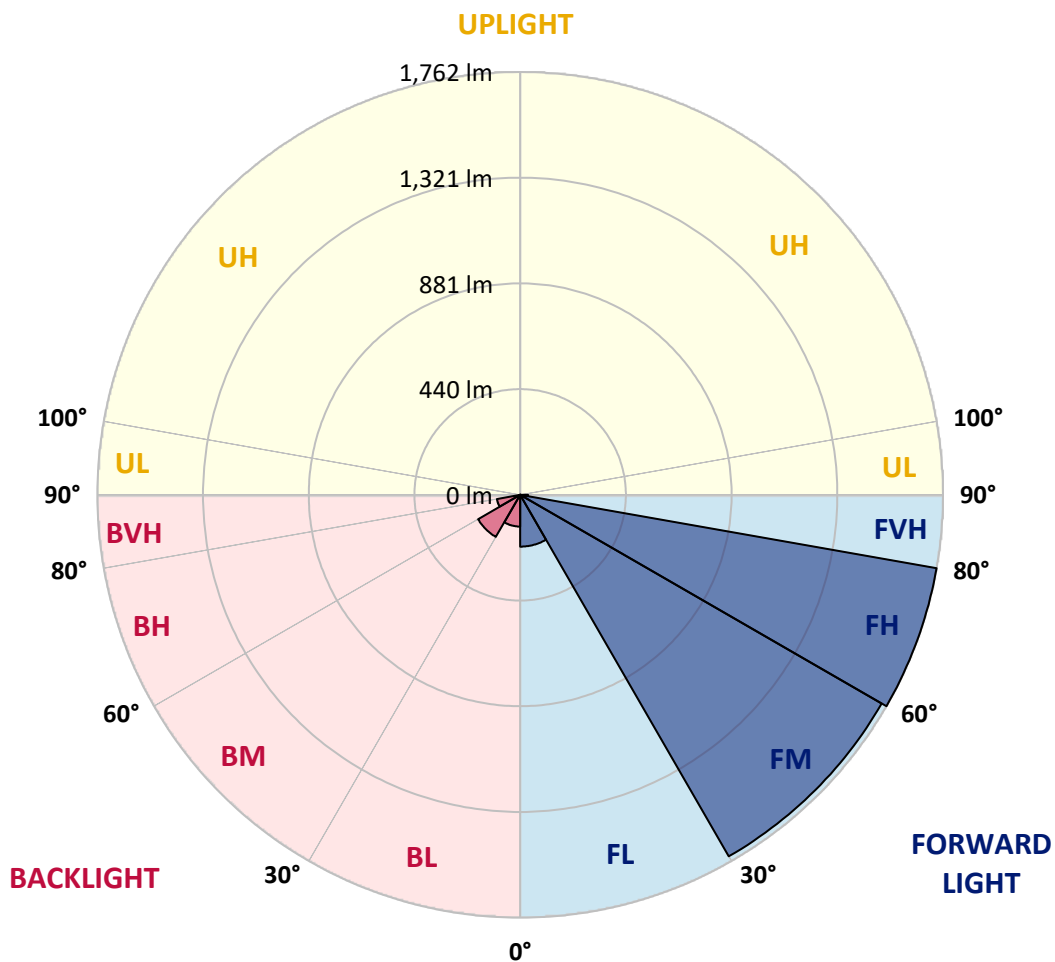
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	216.0	5.2			
FM	(30°-60°)	1739.4	41.6			
FH	(60°-80°)	1761.9	42.1			G1/1800
FVH	(80°-90°)	32.3	0.8			G1/100
BL	(0°-30°)	132.3	3.2	B1/500		
BM	(30°-60°)	202.4	4.8	B0/220		
BH	(60°-80°)	98.4	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: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8
2.5°	466.0	466.0	466.0	466.8	467.8	467.8	469.9	468.8	468.8	468.8	470.8
5°	453.3	454.3	455.3	457.1	461.1	464.0	468.8	468.8	469.9	471.8	472.8
7.5°	435.7	436.7	439.6	443.6	451.3	458.1	466.0	467.8	470.8	475.7	477.5
10°	425.0	427.0	430.8	435.7	444.5	453.3	462.9	466.0	474.8	483.5	488.4
12.5°	422.1	423.0	427.0	434.7	445.5	456.2	468.8	471.8	484.5	498.1	505.8
15°	427.0	428.0	429.8	438.6	451.3	465.0	481.5	485.4	501.1	516.6	526.3
17.5°	435.7	435.7	437.7	445.5	459.2	474.8	496.1	502.1	519.5	537.0	547.7
20°	441.5	441.5	444.5	452.2	467.8	488.4	513.7	521.5	541.0	560.5	570.2
22.5°	447.4	448.3	451.3	460.1	477.5	505.8	535.1	542.9	565.4	585.9	595.5
25°	464.0	462.9	464.0	471.8	492.2	527.3	564.3	574.1	597.6	619.9	624.9
27.5°	509.8	507.8	495.1	490.3	505.8	549.8	601.4	611.1	638.4	660.9	660.9
30°	615.1	611.1	579.9	540.1	527.3	570.2	636.4	650.2	685.2	704.7	698.9
32.5°	748.6	739.8	699.9	631.7	580.9	597.6	673.5	689.1	733.9	750.5	737.9
35°	894.8	893.9	844.1	756.5	684.2	654.1	721.2	739.8	796.3	811.0	790.5
37.5°	1049.8	1053.7	1020.6	899.7	814.9	746.6	784.7	806.0	875.3	892.8	873.3
40°	1222.4	1221.3	1208.7	1065.4	971.8	878.3	876.2	895.8	979.6	1006.9	979.6
42.5°	1440.7	1438.7	1392.9	1264.3	1161.9	1049.8	1009.9	1016.6	1110.2	1155.1	1115.1
45°	1662.9	1649.3	1596.6	1485.4	1394.9	1262.3	1186.2	1186.2	1266.3	1327.7	1265.3
47.5°	1786.6	1773.1	1751.7	1690.3	1662.9	1514.7	1402.7	1389.0	1451.4	1513.7	1426.1
50°	1949.5	1949.5	1895.9	1872.4	1919.3	1814.9	1641.5	1627.8	1658.0	1707.8	1592.8
52.5°	2078.1	2054.8	2016.8	2037.3	2170.8	2123.0	1880.3	1853.9	1877.4	1890.0	1738.0
55°	2131.8	2109.3	2106.4	2181.4	2388.1	2321.8	2124.9	2101.6	2099.6	2037.3	1864.7
57.5°	2142.5	2123.0	2160.1	2291.7	2599.7	2484.6	2368.7	2351.0	2296.4	2140.5	1994.3
60°	2051.8	2061.6	2151.3	2352.0	2724.4	2625.9	2574.4	2555.8	2430.1	2228.2	2138.5
62.5°	1865.7	1889.0	2056.7	2358.0	2678.6	2683.4	2688.4	2675.7	2533.4	2308.1	2283.9
65°	1645.3	1652.3	1853.9	2277.1	2598.6	2665.9	2772.2	2771.2	2612.4	2397.8	2447.6
67.5°	1355.9	1367.6	1542.0	2004.1	2438.8	2658.2	2882.3	2879.3	2702.0	2500.3	2545.1
70°	1008.8	1023.4	1164.8	1558.6	2082.0	2560.7	3026.6	3028.5	2796.6	2578.1	2477.7
71°	786.6	813.0	961.0	1323.7	1899.7	2462.3	3040.3	3057.8	2807.3	2567.4	2339.4
72.5°	386.0	417.3	603.4	931.8	1563.5	2241.9	2950.6	2984.7	2740.0	2434.0	2000.2
75°	100.4	106.3	180.3	381.2	838.3	1485.4	2379.3	2466.0	2240.0	1853.1	1222.4
77.5°	63.4	65.2	84.8	148.2	313.9	564.3	1397.9	1440.7	1279.8	938.6	430.8
80°	44.8	45.9	53.5	95.5	183.3	164.7	503.1	521.5	462.9	248.6	77.1
82.5°	27.3	27.3	38.9	61.4	113.0	89.7	132.6	141.4	124.8	69.2	25.3
85°	15.6	16.6	24.3	42.0	53.5	43.8	49.6	52.6	53.5	45.9	10.7
87.5°	12.7	13.7	21.4	35.2	29.3	21.4	21.4	22.4	23.4	27.3	4.9
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°	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8	472.8
2.5°	470.8	470.8	471.8	470.8	470.8	470.8	471.8	471.8	471.8	473.8	474.8
5°	472.8	472.8	472.8	471.8	470.8	470.8	472.8	473.8	473.8	476.6	476.6
7.5°	477.5	477.5	475.7	473.8	471.8	468.8	469.9	470.8	469.9	470.8	470.8
10°	488.4	488.4	485.4	481.5	475.7	466.8	455.3	440.6	427.0	422.1	420.0
12.5°	505.8	504.8	499.1	492.2	479.5	449.3	405.5	353.8	311.0	299.2	295.4
15°	525.4	523.4	516.6	504.8	470.8	390.9	299.2	233.0	192.0	182.3	180.3
17.5°	545.9	542.9	533.1	509.8	430.8	290.5	193.0	146.2	123.7	121.8	122.8
20°	567.3	563.3	549.8	500.0	348.0	193.9	124.8	113.0	111.1	111.1	112.1
22.5°	591.7	586.9	568.3	465.0	253.4	128.6	107.2	106.3	105.3	104.4	104.4
25°	619.9	614.1	585.9	401.6	174.5	105.3	102.3	99.4	97.5	95.5	94.5
27.5°	654.1	646.2	599.4	323.6	120.0	98.5	96.5	91.6	87.8	83.8	83.8
30°	688.2	678.4	595.5	243.7	97.5	91.6	87.8	81.8	76.0	72.1	71.1
32.5°	724.3	714.5	570.2	163.8	88.8	83.8	79.0	70.2	63.4	58.5	57.5
35°	777.8	770.0	520.5	108.2	79.9	74.1	67.3	58.5	49.6	44.8	43.8
37.5°	857.8	848.0	459.2	82.9	70.2	61.4	55.5	45.9	37.0	32.2	31.3
40°	965.0	935.8	386.0	73.1	61.4	50.7	42.8	33.1	26.3	23.4	23.4
42.5°	1089.7	1020.6	307.0	66.3	54.5	42.0	31.3	22.4	18.5	17.5	17.5
45°	1222.4	1099.5	228.1	61.4	47.8	33.1	22.4	15.6	13.7	12.7	12.7
47.5°	1358.7	1163.8	158.9	55.5	40.0	25.3	15.6	11.7	9.7	8.8	8.8
50°	1486.4	1205.7	112.1	49.6	34.1	18.5	11.7	8.8	6.8	6.8	6.8
52.5°	1575.2	1201.8	80.8	42.8	26.3	12.7	7.7	5.8	5.8	5.8	5.8
55°	1653.2	1187.2	63.4	37.0	20.5	8.8	5.8	4.9	4.9	4.0	4.0
57.5°	1719.4	1163.8	53.5	30.3	14.6	6.8	4.0	4.0	3.0	3.0	3.0
60°	1775.9	1134.6	44.8	25.3	9.7	4.9	3.0	1.9	1.9	1.0	1.9
62.5°	1853.1	1116.1	38.9	19.6	6.8	3.0	1.9	1.0	1.0	0.0	0.0
65°	1909.5	1081.0	33.1	13.7	4.0	1.9	1.0	1.0	0.0	0.0	0.0
67.5°	1911.5	1017.6	24.3	7.7	3.0	1.9	1.0	0.0	0.0	0.0	0.0
70°	1757.4	867.6	15.6	4.0	1.9	1.0	1.0	0.0	0.0	0.0	0.0
71°	1616.1	768.1	12.7	3.0	1.9	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1331.5	564.3	9.7	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	733.9	204.8	4.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	234.8	62.4	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	40.0	9.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.7	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.0	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)