

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: P214800

Luminaire Tested: **ARCH-AF24-50-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214800
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-AF24-50-D-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA 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: 4858 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

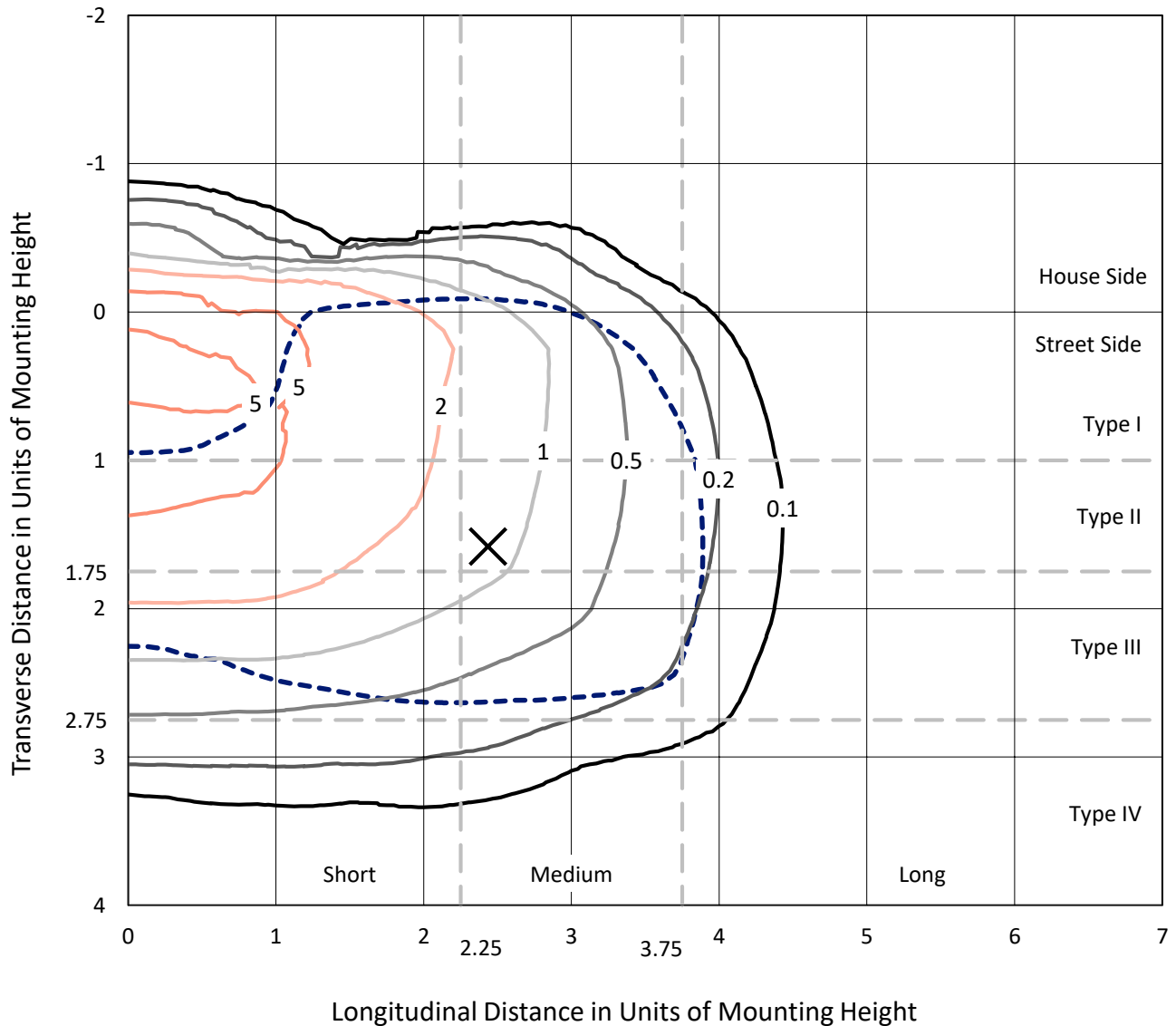
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

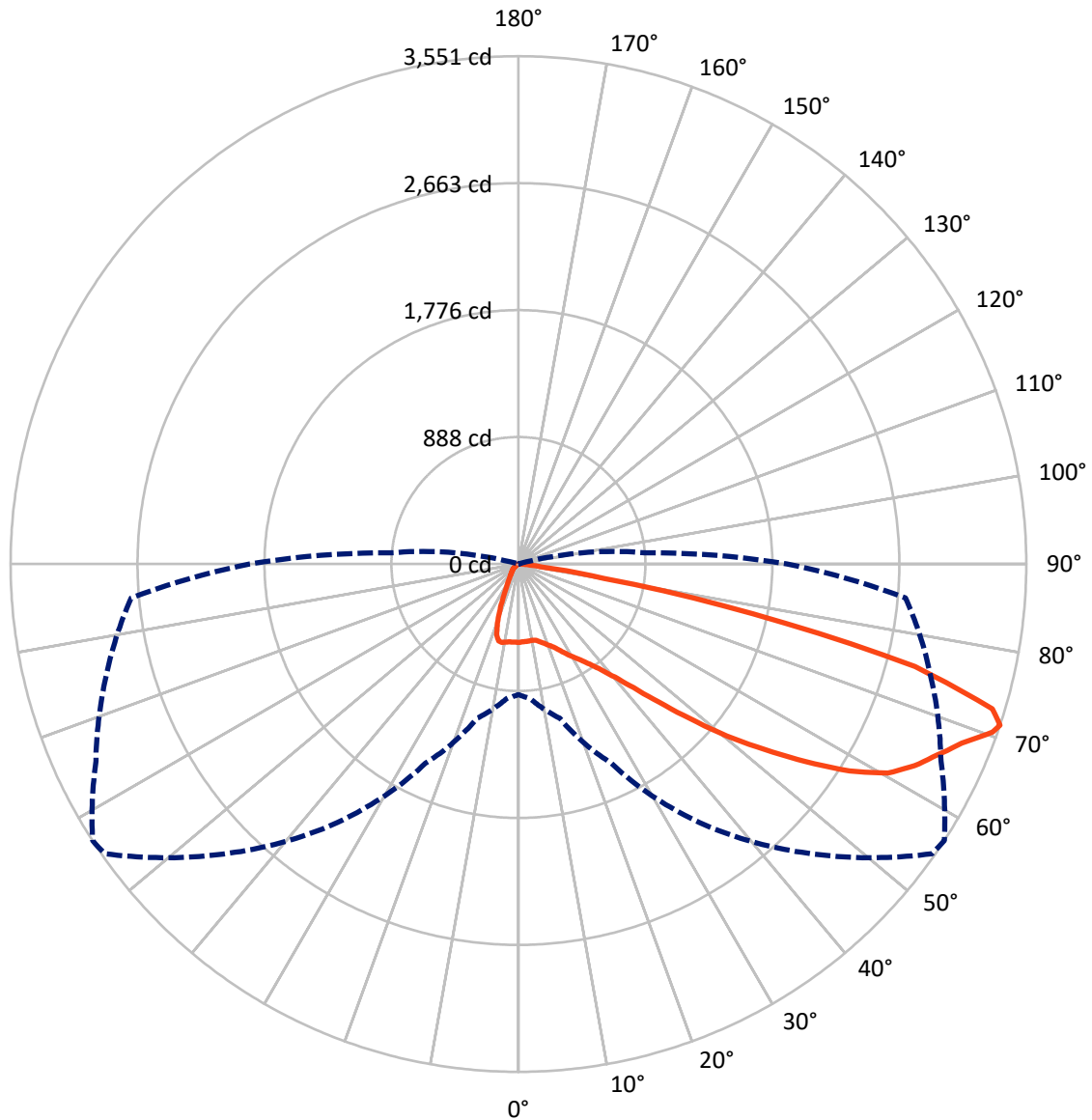


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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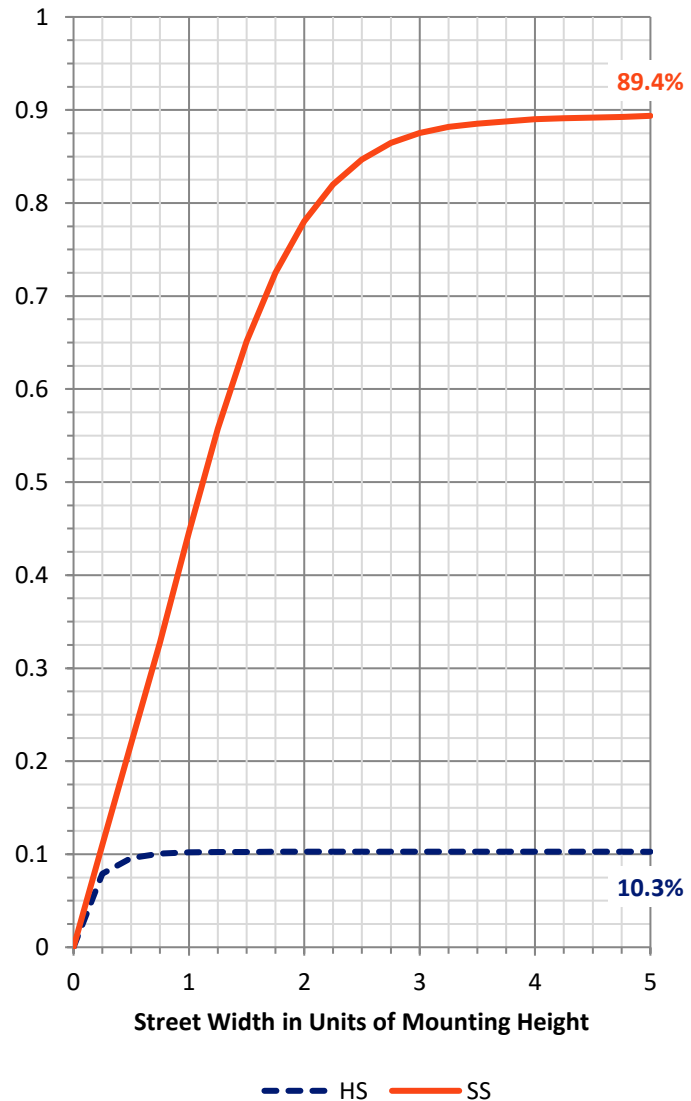
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	503.4	0.0	503.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4354.6	0.0	4354.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	4858.0	0.0	4858.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	1.1
10°-20°	137.9	2.8
20°-30°	215.1	4.4
30°-40°	363.5	7.5
40°-50°	706.0	14.5
50°-60°	1185.6	24.4
60°-70°	1414.9	29.1
70°-80°	745.7	15.3
80°-90°	37.9	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°	4858.0	100.0
0°-180°	4858.0	100.0

Coefficient of Utilization



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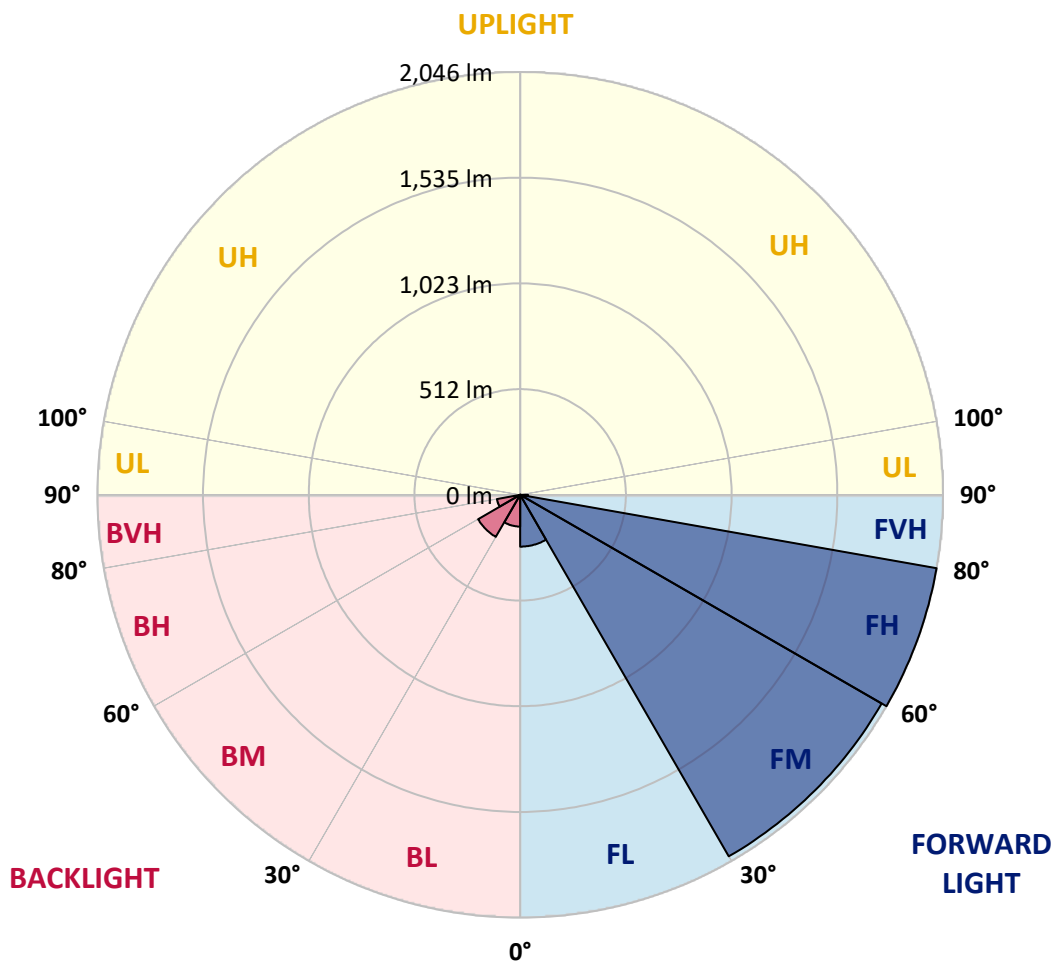
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	250.8	5.2			
FM	(30°-60°)	2020.0	41.6			
FH	(60°-80°)	2046.2	42.1			G2/5000
FVH	(80°-90°)	37.5	0.8			G1/100
BL	(0°-30°)	153.7	3.2	B1/500		
BM	(30°-60°)	235.1	4.8	B1/1000		
BH	(60°-80°)	114.3	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
2.5°	541.1	541.1	541.1	542.3	543.4	543.4	545.6	544.5	544.5	544.5	546.8
5°	526.4	527.5	528.7	530.9	535.4	538.8	544.5	544.5	545.6	547.9	549.0
7.5°	506.1	507.2	510.6	515.1	524.2	532.0	541.1	543.4	546.8	552.4	554.6
10°	493.6	495.8	500.3	506.1	516.2	526.4	537.7	541.1	551.3	561.5	567.1
12.5°	490.2	491.3	495.8	504.9	517.3	529.8	544.5	547.9	562.6	578.5	587.5
15°	495.8	496.9	499.2	509.4	524.2	540.0	559.2	563.7	581.9	600.0	611.3
17.5°	506.1	506.1	508.3	517.3	533.2	551.3	576.2	583.0	603.3	623.7	636.2
20°	512.8	512.8	516.2	525.3	543.4	567.1	596.6	605.6	628.3	650.9	662.3
22.5°	519.6	520.7	524.2	534.3	554.6	587.5	621.4	630.5	656.5	680.4	691.6
25°	538.8	537.7	538.8	547.9	571.6	612.4	655.4	666.8	694.0	720.0	725.6
27.5°	592.1	589.7	575.1	569.4	587.5	638.4	698.5	709.7	741.4	767.5	767.5
30°	714.3	709.7	673.5	627.2	612.4	662.3	739.2	755.0	795.9	818.5	811.6
32.5°	869.4	859.2	812.8	733.6	674.6	694.0	782.3	800.4	852.4	871.7	856.9
35°	1039.2	1038.1	980.3	878.4	794.6	759.5	837.7	859.2	924.8	941.8	918.1
37.5°	1219.2	1223.8	1185.2	1044.8	946.3	867.2	911.2	936.2	1016.5	1037.0	1014.3
40°	1419.5	1418.4	1403.7	1237.3	1128.6	1020.0	1017.6	1040.3	1137.6	1169.3	1137.6
42.5°	1673.1	1670.9	1617.7	1468.2	1349.4	1219.2	1172.8	1180.7	1289.3	1341.4	1295.1
45°	1931.2	1915.4	1854.2	1725.2	1619.9	1466.0	1377.7	1377.7	1470.5	1541.8	1469.4
47.5°	2075.0	2059.1	2034.2	1962.9	1931.2	1759.2	1628.9	1613.1	1685.6	1758.0	1656.2
50°	2264.0	2264.0	2201.8	2174.6	2228.9	2107.8	1906.3	1890.4	1925.6	1983.3	1849.7
52.5°	2413.4	2386.2	2342.1	2365.9	2521.0	2465.5	2183.7	2153.1	2180.2	2194.9	2018.4
55°	2475.7	2449.7	2446.3	2533.4	2773.4	2696.5	2467.8	2440.7	2438.4	2365.9	2165.6
57.5°	2488.1	2465.5	2508.6	2661.4	3019.0	2885.5	2750.8	2730.5	2667.0	2485.9	2316.1
60°	2382.9	2394.2	2498.4	2731.6	3164.0	3049.6	2989.7	2968.1	2822.1	2587.8	2483.6
62.5°	2166.7	2193.8	2388.6	2738.3	3110.8	3116.4	3122.0	3107.4	2942.1	2680.6	2652.3
65°	1910.9	1918.7	2153.1	2644.4	3017.9	3096.1	3219.4	3218.3	3033.8	2784.8	2842.5
67.5°	1574.6	1588.2	1790.9	2327.4	2832.3	3087.0	3347.4	3343.9	3137.9	2903.6	2955.7
70°	1171.6	1188.6	1352.8	1810.1	2417.9	2973.8	3514.9	3517.2	3247.8	2994.2	2877.6
71°	913.5	944.1	1116.1	1537.3	2206.3	2859.5	3530.7	3551.2	3260.2	2981.7	2716.9
72.5°	448.3	484.5	700.7	1082.2	1815.7	2603.6	3426.6	3466.3	3182.1	2826.6	2322.9
75°	116.6	123.4	209.4	442.6	973.5	1725.2	2763.3	2864.0	2601.4	2152.0	1419.5
77.5°	73.6	75.8	98.5	172.1	364.5	655.4	1623.3	1673.1	1486.3	1090.2	500.3
80°	52.1	53.2	62.3	110.9	212.8	191.3	584.1	605.6	537.7	288.7	89.4
82.5°	31.7	31.7	45.3	71.3	131.3	104.1	154.0	164.2	144.8	80.4	29.5
85°	18.1	19.2	28.3	48.7	62.3	50.9	57.7	61.2	62.3	53.2	12.5
87.5°	14.7	15.9	24.9	40.7	34.0	24.9	24.9	26.1	27.2	31.7	5.6
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°	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
2.5°	546.8	546.8	547.9	546.8	546.8	546.8	547.9	547.9	547.9	550.1	551.3
5°	549.0	549.0	549.0	547.9	546.8	546.8	549.0	550.1	550.1	553.5	553.5
7.5°	554.6	554.6	552.4	550.1	547.9	544.5	545.6	546.8	545.6	546.8	546.8
10°	567.1	567.1	563.7	559.2	552.4	542.3	528.7	511.7	495.8	490.2	487.9
12.5°	587.5	586.4	579.6	571.6	557.0	521.9	471.0	410.9	361.1	347.5	343.0
15°	610.2	607.9	600.0	586.4	546.8	454.0	347.5	270.6	223.0	211.6	209.4
17.5°	633.9	630.5	619.2	592.1	500.3	337.4	224.1	169.8	143.7	141.5	142.6
20°	658.9	654.3	638.4	580.7	404.2	225.3	144.8	131.3	129.1	129.1	130.2
22.5°	687.1	681.5	660.0	540.0	294.3	149.5	124.5	123.4	122.2	121.1	121.1
25°	720.0	713.2	680.4	466.4	202.6	122.2	118.9	115.5	113.2	110.9	109.8
27.5°	759.5	750.5	696.2	375.8	139.2	114.4	112.1	106.4	101.9	97.4	97.4
30°	799.2	787.9	691.6	283.1	113.2	106.4	101.9	95.1	88.3	83.8	82.7
32.5°	841.1	829.7	662.3	190.2	103.0	97.4	91.7	81.5	73.6	67.9	66.8
35°	903.4	894.3	604.5	125.6	92.8	86.0	78.2	67.9	57.7	52.1	50.9
37.5°	996.1	984.9	533.2	96.3	81.5	71.3	64.5	53.2	43.1	37.3	36.2
40°	1120.7	1086.8	448.3	84.9	71.3	58.8	49.8	38.5	30.6	27.2	27.2
42.5°	1265.6	1185.2	356.6	76.9	63.4	48.7	36.2	26.1	21.5	20.4	20.4
45°	1419.5	1276.9	264.8	71.3	55.4	38.5	26.1	18.1	15.9	14.7	14.7
47.5°	1578.0	1351.6	184.5	64.5	46.4	29.5	18.1	13.6	11.4	10.2	10.2
50°	1726.3	1400.3	130.2	57.7	39.6	21.5	13.6	10.2	7.9	7.9	7.9
52.5°	1829.3	1395.8	93.9	49.8	30.6	14.7	9.1	6.8	6.8	6.8	6.8
55°	1919.9	1378.8	73.6	43.1	23.7	10.2	6.8	5.6	5.6	4.5	4.5
57.5°	1996.9	1351.6	62.3	35.1	17.0	7.9	4.5	4.5	3.4	3.4	3.4
60°	2062.6	1317.7	52.1	29.5	11.4	5.6	3.4	2.3	2.3	1.1	2.3
62.5°	2152.0	1296.2	45.3	22.6	7.9	3.4	2.3	1.1	1.1	0.0	0.0
65°	2217.7	1255.4	38.5	15.9	4.5	2.3	1.1	1.1	0.0	0.0	0.0
67.5°	2219.9	1181.8	28.3	9.1	3.4	2.3	1.1	0.0	0.0	0.0	0.0
70°	2041.0	1007.5	18.1	4.5	2.3	1.1	1.1	0.0	0.0	0.0	0.0
71°	1876.9	892.0	14.7	3.4	2.3	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1546.3	655.4	11.4	3.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0
75°	852.4	237.7	5.6	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	272.8	72.4	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	46.4	11.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.9	4.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	1.1	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)