

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: P265962

Luminaire Tested: **ARCH-AF24-70-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-70-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5024.2 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 74
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

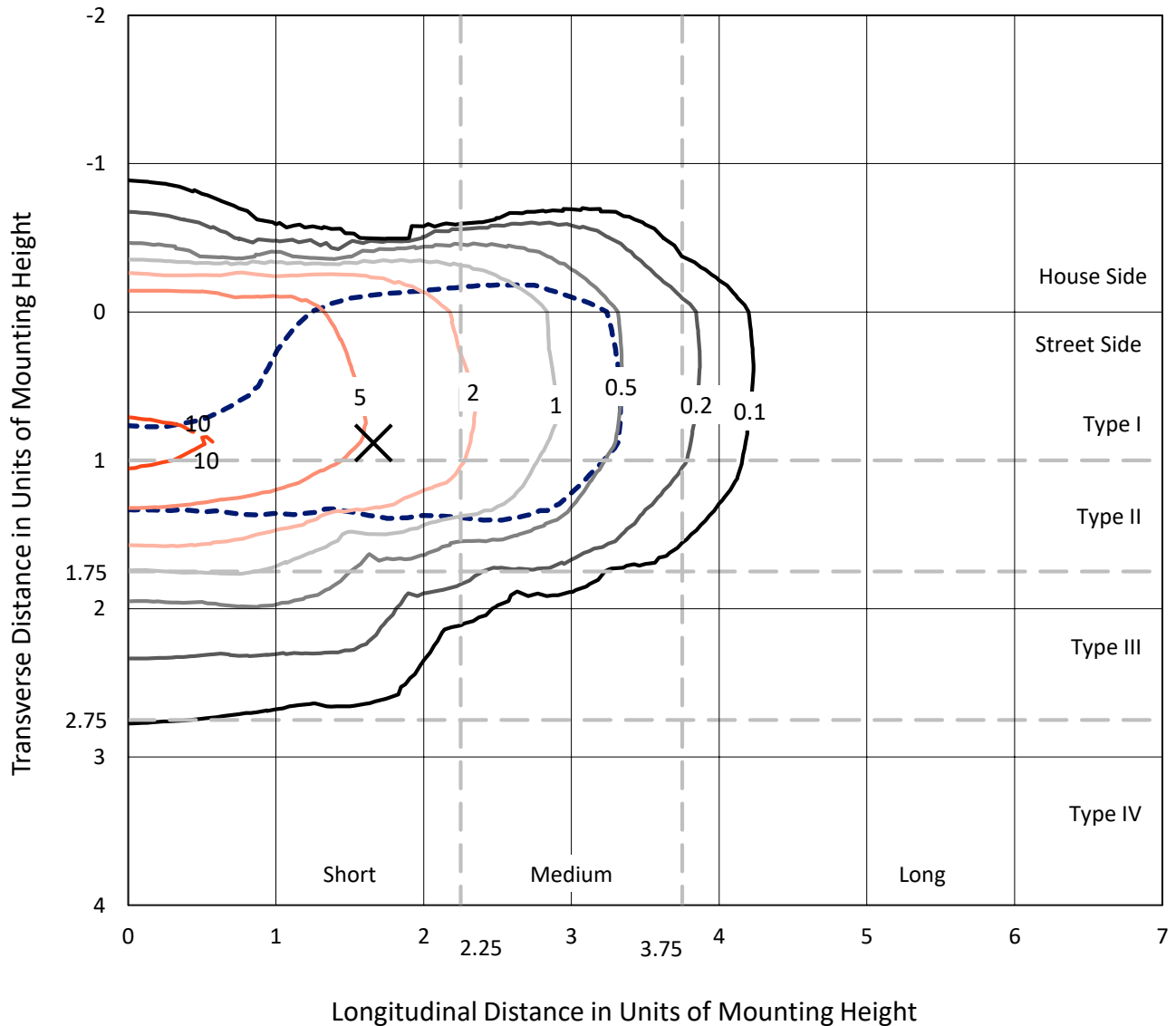


REPORT NUMBER: P265962

CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

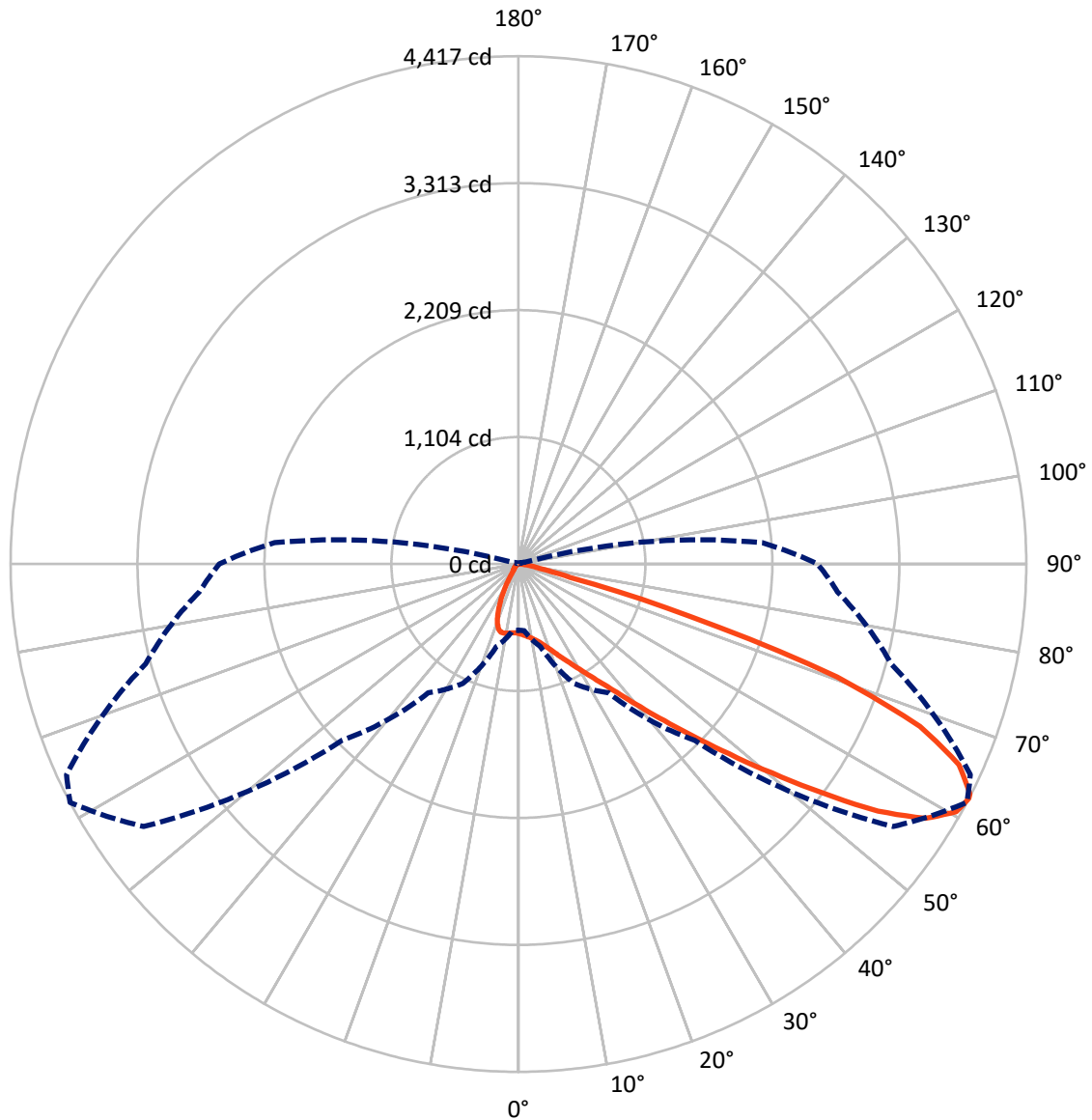


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P265962

CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P265962

CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

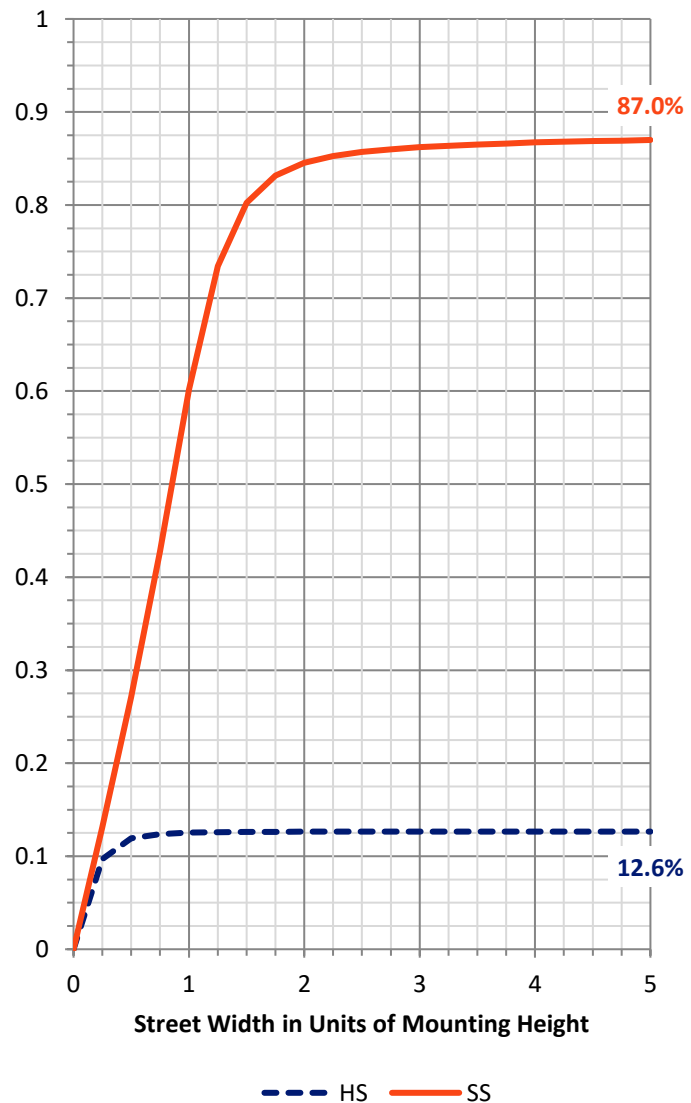
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	642.4	0.0	642.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4381.8	0.0	4381.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	5024.2	0.0	5024.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	1.2
10°-20°	162.6	3.2
20°-30°	273.2	5.4
30°-40°	523.6	10.4
40°-50°	1069.5	21.3
50°-60°	1415.4	28.2
60°-70°	1099.5	21.9
70°-80°	396.9	7.9
80°-90°	25.3	0.5
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°	5024.2	100.0
0°-180°	5024.2	100.0



REPORT NUMBER: P265962

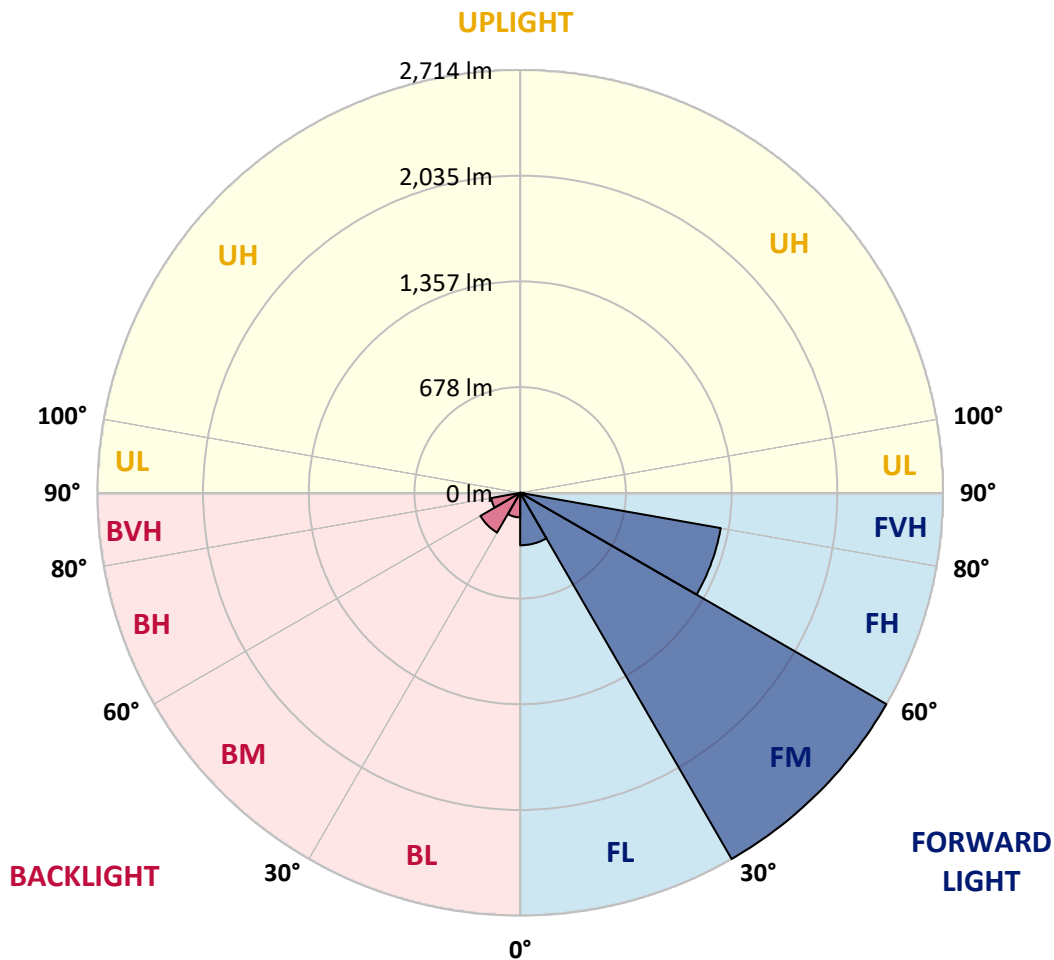
CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	336.8	6.7			
FM (30°-60°)	2713.6	54.0			
FH (60°-80°)	1307.2	26.0			G1/1800
FVH (80°-90°)	24.2	0.5			G1/100
BL (0°-30°)	157.2	3.1	B1/500		
BM (30°-60°)	294.9	5.9	B1/1000		
BH (60°-80°)	189.2	3.8	B1/500		G1/500
BVH (80°-90°)	1.1	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 II Short





REPORT NUMBER: P265962

CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3
2.5°	621.3	620.1	618.8	617.6	617.6	616.3	615.1	612.6	610.2	607.8	606.4
5°	632.3	631.1	629.9	631.1	629.9	629.9	628.8	626.2	623.8	620.1	616.3
7.5°	641.0	639.9	638.5	639.9	641.0	642.3	643.5	641.0	639.9	634.9	631.1
10°	652.2	650.9	649.7	652.2	652.2	658.4	659.5	658.4	657.1	653.3	647.1
12.5°	668.2	669.4	669.4	671.9	674.4	681.9	684.2	680.6	680.6	675.6	668.2
15°	697.9	697.9	697.9	700.4	701.5	711.5	714.0	710.2	712.6	704.0	696.6
17.5°	726.3	727.4	730.1	735.0	735.0	743.5	748.5	748.5	753.5	742.3	732.5
20°	754.7	756.0	759.6	770.7	770.7	781.9	790.5	794.2	799.1	788.1	770.7
22.5°	785.6	785.6	791.8	809.1	805.3	827.6	843.6	849.7	854.7	839.9	812.7
25°	832.5	827.6	832.5	848.5	846.2	876.9	906.6	912.8	919.0	901.7	860.9
27.5°	921.4	914.0	896.7	897.9	897.9	933.8	975.7	984.5	988.1	973.4	922.6
30°	1099.3	1099.3	1035.0	991.9	963.4	995.5	1054.8	1069.6	1074.6	1052.4	985.7
32.5°	1409.4	1409.4	1290.8	1180.8	1073.4	1073.4	1141.2	1168.4	1173.4	1147.5	1069.6
35°	1804.5	1802.1	1624.2	1473.6	1263.6	1184.5	1242.5	1288.3	1303.1	1268.4	1178.3
37.5°	2224.6	2208.5	2017.1	1844.1	1556.4	1362.4	1379.6	1440.3	1453.7	1425.4	1319.2
40°	2565.4	2547.0	2392.5	2248.0	1934.3	1646.5	1577.3	1632.8	1649.0	1609.5	1487.1
42.5°	2874.2	2828.6	2722.4	2618.6	2369.0	2138.1	1840.4	1862.6	1880.0	1837.9	1676.1
45°	3097.7	3027.4	2973.0	2941.0	2808.8	2677.8	2181.4	2136.9	2142.9	2091.2	1882.4
47.5°	3104.0	3054.5	3059.4	3143.4	3197.8	3192.8	2624.7	2466.7	2443.2	2356.8	2102.3
50°	2807.6	2835.9	2926.0	3165.7	3459.7	3637.5	3152.2	2856.9	2786.5	2630.9	2321.0
52.5°	2313.4	2358.0	2527.1	2931.0	3498.0	3930.4	3699.3	3302.8	3176.9	2902.7	2488.8
55°	1812.1	1814.4	1992.4	2403.7	3242.3	3983.4	4136.5	3793.3	3600.4	3108.9	2600.1
57.5°	1246.3	1314.2	1540.2	1816.9	2665.5	3719.2	4300.8	4173.6	3925.4	3236.1	2677.8
60°	816.4	820.2	1083.3	1403.2	1814.4	3026.2	4200.8	4374.9	4188.4	3311.5	2730.9
62°	575.5	581.7	744.9	1146.2	1367.3	2169.0	3979.8	4417.0	4336.7	3356.0	2786.5
62.5°	533.7	538.5	675.6	1082.0	1284.5	1945.4	3900.6	4407.1	4358.8	3370.8	2806.2
65°	391.5	391.5	442.1	743.5	941.2	1051.1	3305.4	4210.6	4329.2	3489.3	2880.4
67.5°	302.5	305.1	322.4	458.2	710.2	637.3	2109.7	3768.5	4020.5	3664.7	2922.4
70°	260.6	259.4	271.7	303.8	512.7	423.7	928.8	2941.0	3367.0	3620.3	2884.1
72.5°	192.6	193.9	222.3	266.7	356.9	275.4	420.0	1561.3	2183.8	2833.4	2471.5
75°	123.4	124.8	156.8	209.9	256.9	180.3	242.2	465.6	894.3	1571.1	1511.8
77.5°	82.7	85.2	102.5	147.1	224.8	112.4	152.0	195.1	269.2	589.2	542.2
80°	55.5	55.5	65.4	98.9	142.0	93.9	81.6	129.6	139.5	182.8	91.4
82.5°	37.1	37.1	43.2	65.4	92.6	84.0	49.3	70.3	81.6	91.4	32.1
85°	22.3	22.3	29.6	40.8	60.5	46.9	32.1	39.5	42.0	58.0	17.2
87.5°	13.6	12.3	19.8	28.3	32.1	28.3	21.0	21.0	22.3	32.1	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265962

CATALOG NUMBER: ARCH-AF24-70-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3	605.3
2.5°	604.0	602.8	601.5	599.1	595.3	592.9	590.4	587.9	585.4	585.4	589.2
5°	615.1	611.3	606.4	601.5	594.0	589.2	585.4	580.6	578.1	578.1	579.2
7.5°	628.8	625.0	616.3	607.8	596.6	587.9	579.2	568.2	559.6	555.8	559.6
10°	643.5	638.5	626.2	612.6	600.2	578.1	549.7	515.1	485.4	471.8	478.0
12.5°	662.1	655.9	641.0	622.5	594.0	539.8	469.4	389.1	338.4	314.9	319.8
15°	689.2	680.6	659.5	631.1	568.2	450.8	336.0	243.4	196.4	176.6	179.1
17.5°	721.2	710.2	681.9	628.8	501.4	324.8	200.1	142.0	122.3	117.4	117.4
20°	756.0	741.1	704.0	610.2	400.1	203.7	124.8	108.7	101.2	97.6	97.6
22.5°	791.8	772.0	722.5	566.9	285.3	127.2	102.5	91.4	82.7	79.1	79.1
25°	835.0	809.1	741.1	491.6	181.5	102.5	87.8	76.5	67.9	63.1	64.1
27.5°	885.5	852.2	757.1	397.7	117.4	88.9	72.9	61.8	54.3	51.9	51.9
30°	938.6	899.3	760.9	297.7	95.1	76.5	60.5	50.7	45.8	43.2	43.2
32.5°	1011.6	959.7	749.7	197.6	80.3	64.1	50.7	42.0	38.3	37.1	37.1
35°	1107.9	1038.8	723.9	122.3	67.9	53.1	42.0	37.1	33.3	32.1	32.1
37.5°	1230.1	1148.8	678.1	84.0	58.0	43.2	35.8	32.1	29.6	28.3	28.3
40°	1393.4	1282.2	618.8	72.9	49.3	37.1	30.9	28.3	26.0	26.0	26.0
42.5°	1566.1	1443.9	542.2	64.1	42.0	32.1	27.2	24.8	23.4	22.3	22.3
45°	1755.2	1609.5	447.1	56.9	35.8	28.3	24.8	21.0	19.8	19.8	19.8
47.5°	1942.9	1779.9	343.4	49.3	30.9	24.8	21.0	18.5	17.2	16.1	16.1
50°	2135.6	1934.3	252.0	43.2	27.2	22.3	18.5	16.1	13.6	12.3	12.3
52.5°	2275.1	2026.8	184.1	37.1	23.4	18.5	14.8	12.3	9.9	8.7	8.7
55°	2377.8	2083.7	134.7	30.9	21.0	16.1	12.3	9.9	7.5	7.5	6.2
57.5°	2458.0	2110.8	101.2	27.2	18.5	13.6	9.9	7.5	6.2	4.9	4.9
60°	2519.7	2112.2	75.4	22.3	16.1	11.0	7.5	4.9	3.8	3.8	3.8
62°	2601.2	2128.2	61.8	18.5	14.8	9.9	6.2	3.8	2.4	1.3	1.3
62.5°	2624.7	2134.4	59.3	18.5	13.6	8.7	4.9	3.8	2.4	1.3	1.3
65°	2733.5	2145.5	45.8	14.8	11.0	7.5	3.8	2.4	0.0	0.0	0.0
67.5°	2832.3	2128.2	33.3	11.0	8.7	4.9	3.8	1.3	0.0	0.0	0.0
70°	2822.4	2009.6	23.4	7.5	6.2	3.8	2.4	0.0	0.0	0.0	0.0
72.5°	2325.8	1504.4	16.1	6.2	3.8	2.4	1.3	0.0	0.0	0.0	0.0
75°	1404.4	658.4	11.0	3.8	3.8	2.4	1.3	0.0	0.0	0.0	0.0
77.5°	460.7	238.4	7.5	2.4	2.4	1.3	1.3	0.0	0.0	0.0	0.0
80°	75.4	39.5	3.8	2.4	2.4	1.3	1.3	0.0	0.0	0.0	0.0
82.5°	23.4	9.9	2.4	2.4	1.3	1.3	0.0	0.0	0.0	0.0	0.0
85°	8.7	3.8	2.4	2.4	1.3	1.3	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	2.4	2.4	2.4	1.3	1.3	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)