

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: P214927

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4739 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 64
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

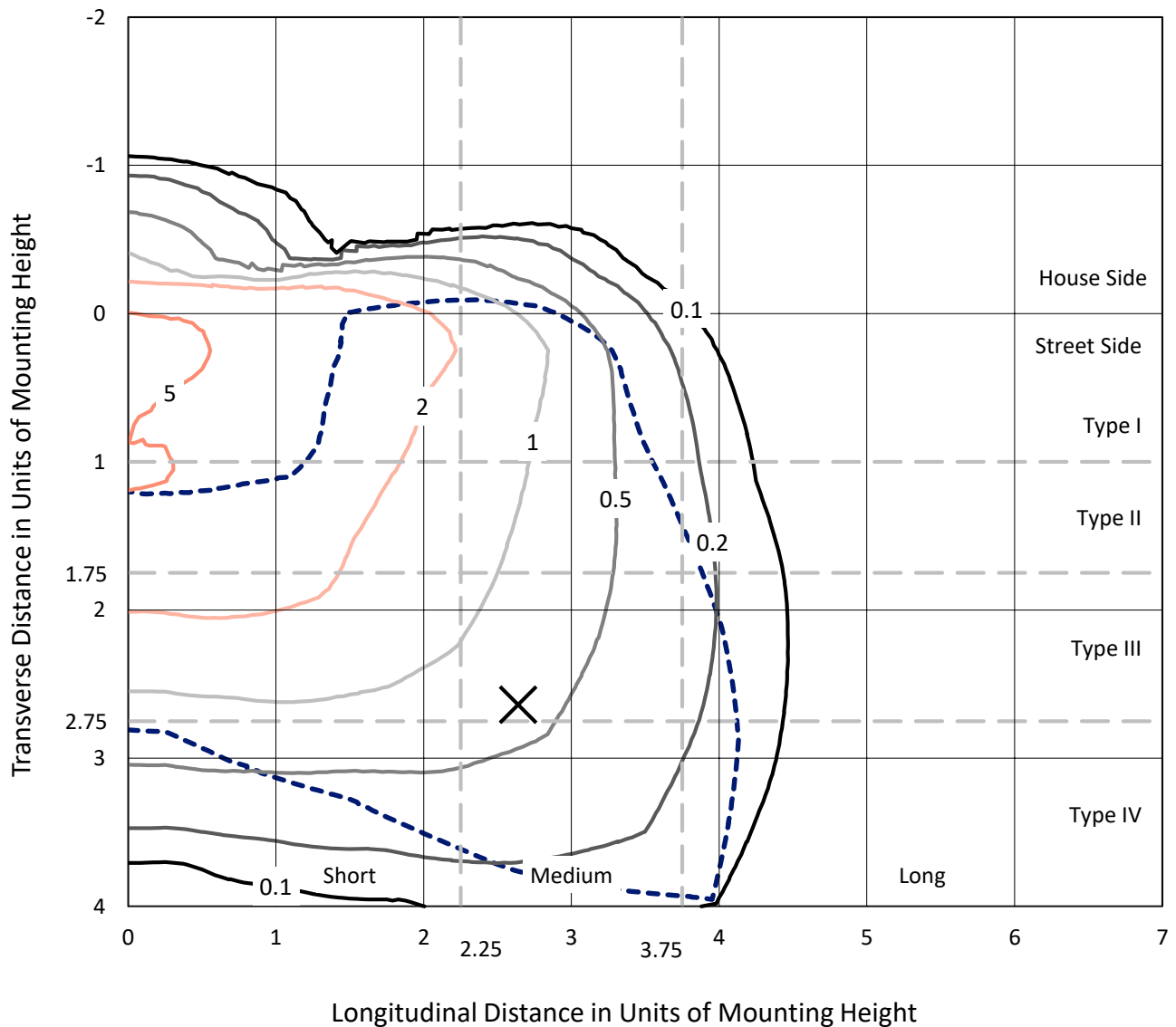


REPORT NUMBER: P214927

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

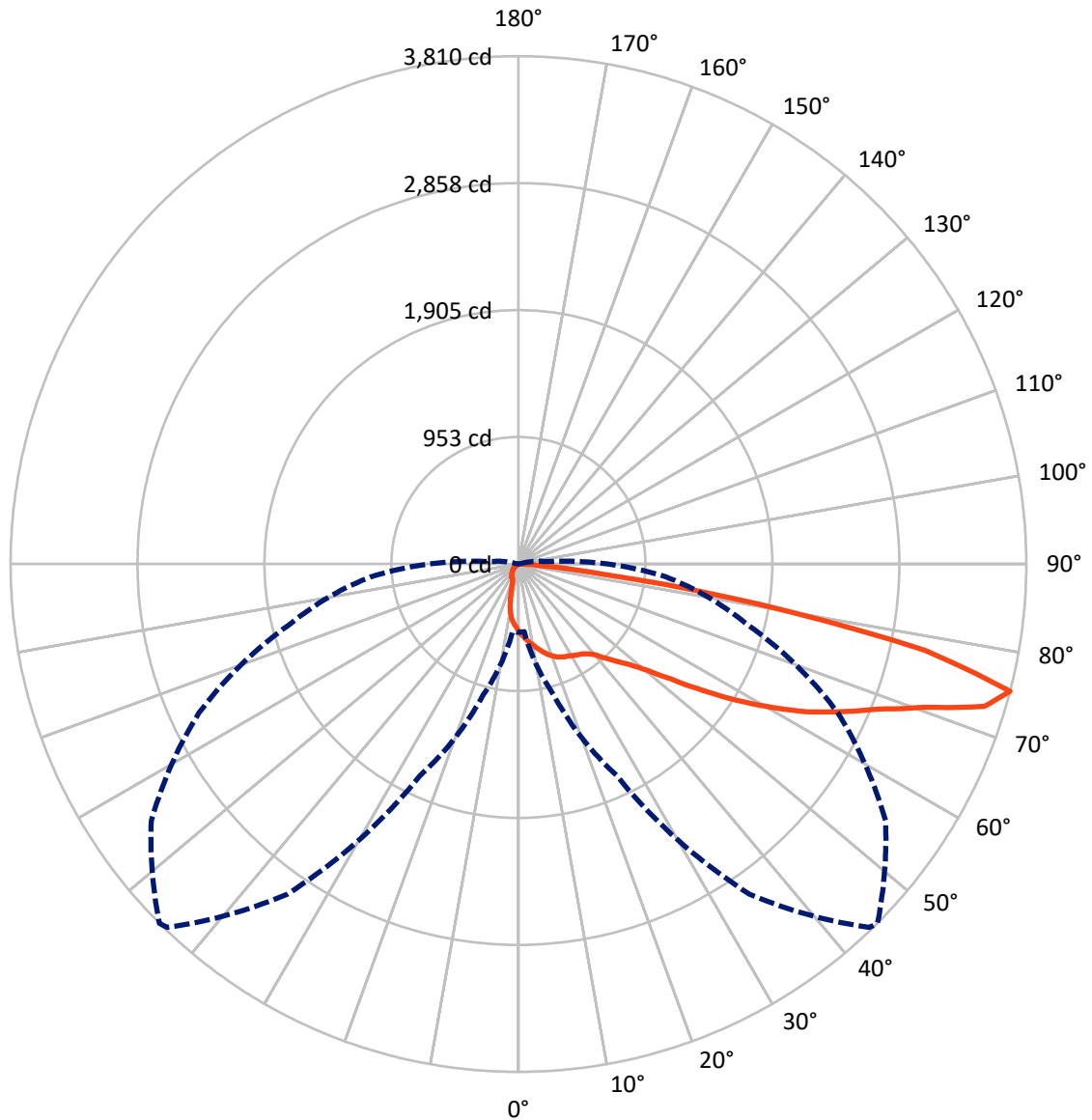


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214927

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P214927

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

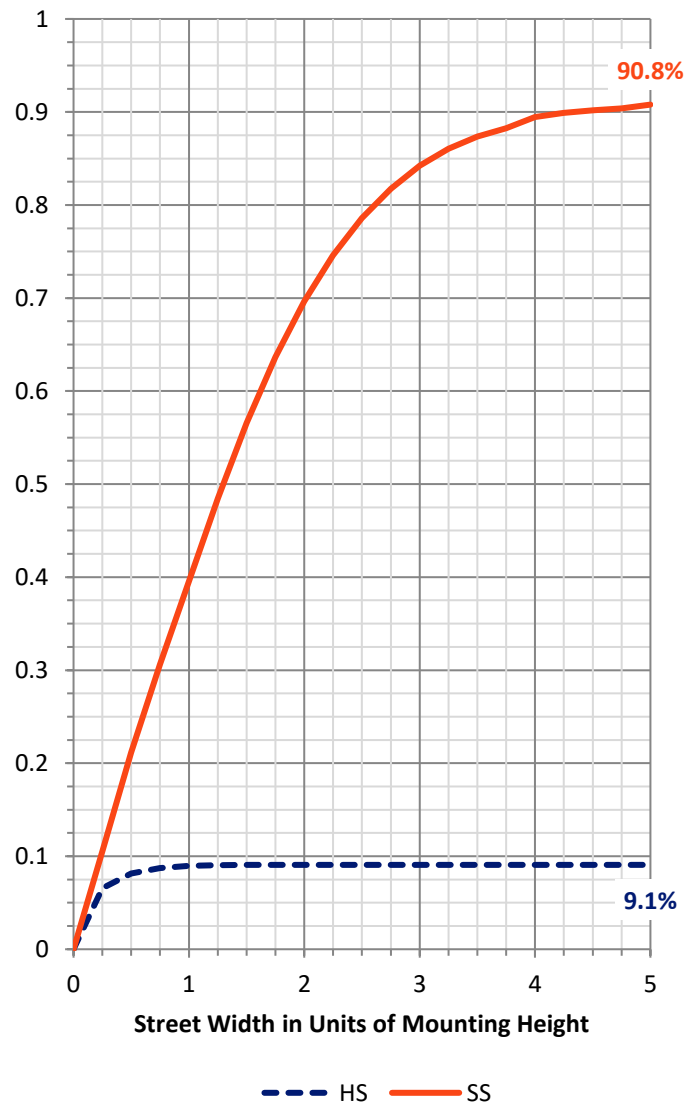
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	433.5	0.0	433.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	4305.5	0.0	4305.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	4739.0	0.0	4739.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.0
10°-20°	135.5	2.9
20°-30°	224.4	4.7
30°-40°	324.8	6.9
40°-50°	531.9	11.2
50°-60°	947.7	20.0
60°-70°	1393.2	29.4
70°-80°	1051.1	22.2
80°-90°	82.5	1.7
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°	4739.0	100.0
0°-180°	4739.0	100.0

Coefficient of Utilization



REPORT NUMBER: P214927

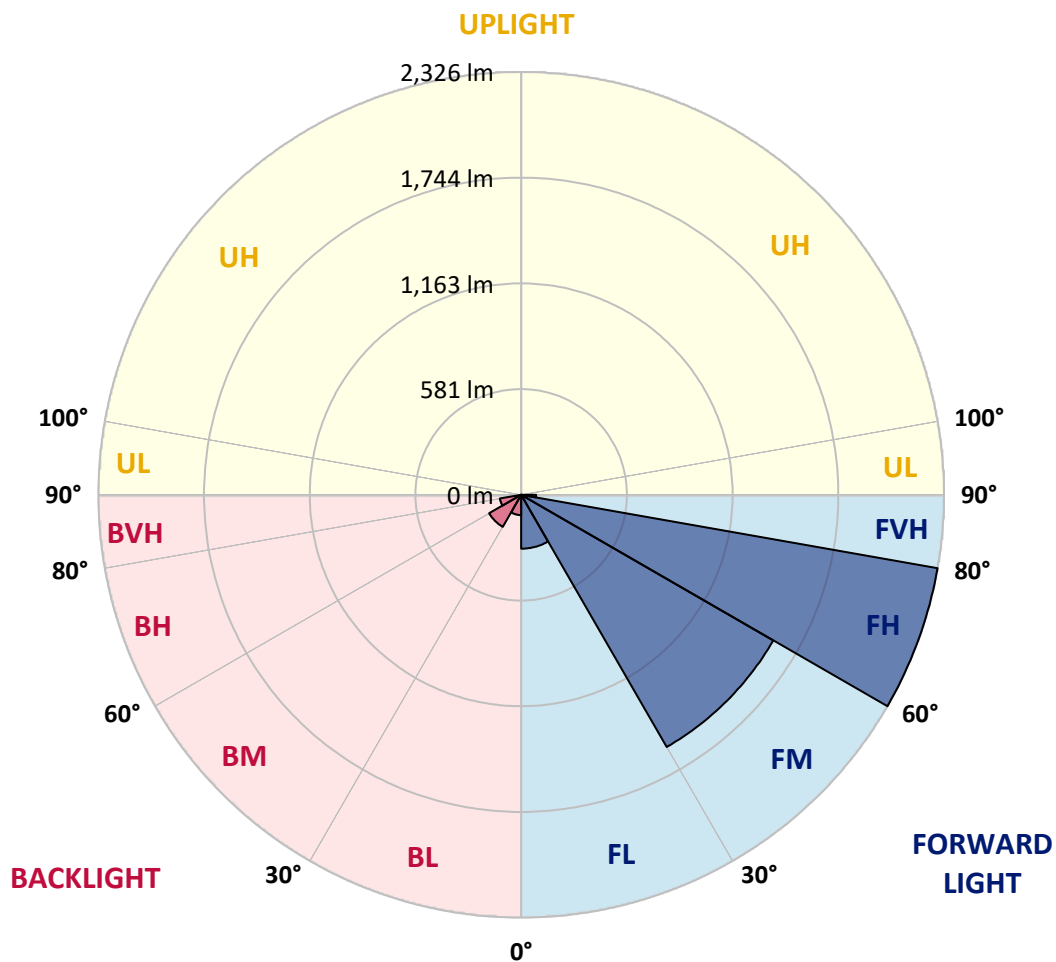
CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.4	6.3			
FM	(30°-60°)	1601.3	33.8			
FH	(60°-80°)	2325.6	49.1			G2/5000
FVH	(80°-90°)	82.2	1.7			G1/100
BL	(0°-30°)	111.4	2.4	B1/500		
BM	(30°-60°)	203.1	4.3	B0/220		
BH	(60°-80°)	118.7	2.5	B1/500		G1/500
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: B1-U0-G2

Type IV Medium





REPORT NUMBER: P214927

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9
2.5°	550.6	550.6	549.5	548.4	542.7	537.1	536.0	532.7	522.6	515.8	509.1
5°	596.6	597.7	595.5	589.8	577.5	565.2	564.1	555.1	536.0	522.6	508.0
7.5°	640.3	642.5	636.9	626.8	612.3	594.3	593.2	576.4	551.7	532.7	511.3
10°	677.3	677.3	669.5	657.1	641.4	622.4	620.1	601.1	573.0	549.5	521.4
12.5°	717.7	716.6	705.3	688.5	670.6	652.6	651.5	628.0	601.1	570.8	536.0
15°	754.7	752.4	737.9	722.2	703.1	684.0	682.9	659.4	631.3	595.5	557.3
17.5°	774.9	773.7	760.3	744.6	728.9	714.3	713.2	688.5	658.2	621.2	578.6
20°	778.2	779.4	768.1	754.7	745.7	737.9	737.9	715.4	682.9	643.7	601.1
22.5°	779.4	782.7	774.9	756.9	754.7	755.8	758.0	740.1	706.5	669.5	624.6
25°	787.2	791.7	786.1	764.8	762.5	770.4	772.6	764.8	734.5	697.5	651.5
27.5°	802.9	807.4	802.9	776.0	772.6	780.5	782.7	787.2	764.8	724.4	679.6
30°	834.3	835.4	825.3	791.7	785.0	795.1	798.4	810.8	792.8	750.2	706.5
32.5°	889.3	878.0	847.8	802.9	797.3	808.5	811.9	825.3	818.6	774.9	734.5
35°	1001.4	943.1	873.6	818.6	813.0	824.2	828.7	847.8	851.1	809.6	769.3
37.5°	1000.3	947.6	934.1	848.9	841.0	848.9	854.5	878.0	891.5	855.6	819.7
40°	1070.9	1048.5	1048.5	906.1	880.3	891.5	897.1	920.6	944.2	916.2	879.2
42.5°	1292.9	1278.4	1262.7	1016.0	935.2	966.6	970.0	984.6	1012.6	1003.6	959.9
45°	1540.8	1527.3	1466.8	1202.1	1029.4	1035.0	1042.9	1066.4	1106.8	1123.6	1072.0
47.5°	1734.8	1721.3	1669.7	1426.4	1176.3	1127.0	1127.0	1173.0	1235.8	1278.4	1229.0
50°	1890.6	1874.9	1843.5	1665.2	1417.4	1259.3	1252.6	1306.4	1399.5	1465.6	1432.0
52.5°	2042.0	1996.0	1977.0	1911.9	1689.9	1451.1	1433.1	1471.2	1600.2	1682.1	1654.0
55°	2142.9	2136.2	2116.0	2138.5	1975.9	1684.3	1668.6	1676.5	1837.9	1892.9	1858.1
57.5°	2237.1	2236.0	2280.9	2385.2	2287.6	1951.2	1926.5	1914.2	2067.8	2054.4	2084.6
60°	2353.8	2333.6	2437.9	2587.0	2573.6	2211.4	2183.3	2158.6	2243.9	2205.7	2356.0
62.5°	2359.4	2353.8	2565.7	2779.9	2857.3	2476.0	2443.5	2354.9	2397.5	2353.8	2615.0
65°	2145.2	2173.2	2619.5	2881.9	3095.0	2708.1	2668.9	2530.9	2534.3	2505.2	2920.1
67.5°	2097.0	2111.6	2471.5	2991.8	3266.6	2942.5	2905.5	2733.9	2693.5	2695.8	3100.6
70°	1977.0	1999.4	2287.6	2984.0	3402.3	3255.4	3218.3	3032.2	2934.6	2825.9	2961.6
72.5°	1510.5	1548.6	1927.6	2616.2	3365.2	3664.7	3654.6	3410.1	3031.1	2594.9	2240.5
75°	511.3	510.2	1012.6	1757.2	3023.2	3790.2	3810.4	3363.0	2644.2	1789.7	1112.4
77.5°	109.9	111.0	208.6	712.1	2008.4	3043.4	3120.8	2536.6	1705.6	797.3	254.6
80°	53.8	54.9	86.3	188.4	802.9	1706.7	1827.8	1304.2	630.2	159.2	42.6
82.5°	26.9	28.0	44.9	99.8	297.2	606.7	648.2	479.9	180.5	89.7	21.3
85°	10.1	10.1	22.4	59.4	135.7	142.4	174.9	139.1	108.8	72.9	5.6
87.5°	2.2	2.2	12.3	29.2	60.6	44.9	44.9	42.6	66.2	49.3	2.2
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: P214927

CATALOG NUMBER: ARCH-AF24-60-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9	506.9
2.5°	505.7	501.3	493.4	485.6	479.9	473.2	469.9	466.5	465.4	464.2	466.5
5°	500.1	493.4	478.8	466.5	455.3	446.3	439.6	432.9	429.5	427.2	428.4
7.5°	500.1	490.0	468.7	449.7	431.7	412.7	393.6	379.0	367.8	361.1	362.2
10°	505.7	492.3	464.2	438.5	404.8	364.4	323.0	291.6	270.3	257.9	257.9
12.5°	518.1	500.1	465.4	425.0	367.8	297.2	234.4	196.2	180.5	171.6	172.7
15°	534.9	513.6	471.0	407.1	316.2	220.9	163.7	139.1	139.1	141.3	142.4
17.5°	554.0	530.4	475.5	380.1	250.1	158.1	129.0	126.7	130.1	135.7	135.7
20°	573.0	547.2	477.7	337.5	187.3	125.6	122.2	122.2	124.5	130.1	131.2
22.5°	596.6	568.5	475.5	284.8	140.2	118.9	117.7	117.7	117.7	124.5	124.5
25°	621.2	593.2	466.5	228.8	118.9	114.4	113.3	112.1	112.1	117.7	118.9
27.5°	649.3	619.0	445.2	174.9	112.1	109.9	108.8	106.5	106.5	111.0	111.0
30°	677.3	648.2	412.7	132.3	106.5	105.4	103.2	100.9	98.7	103.2	103.2
32.5°	707.6	678.4	370.1	105.4	98.7	98.7	97.6	94.2	92.0	94.2	95.3
35°	748.0	713.2	321.8	92.0	88.6	88.6	88.6	87.5	83.0	85.2	85.2
37.5°	801.8	761.4	265.8	85.2	80.7	78.5	78.5	78.5	75.1	76.3	76.3
40°	870.2	817.5	211.9	79.6	75.1	69.5	67.3	68.4	66.2	66.2	65.0
42.5°	963.3	878.0	159.2	75.1	70.6	62.8	58.3	57.2	54.9	53.8	53.8
45°	1096.7	952.0	114.4	70.6	67.3	54.9	50.5	47.1	41.5	38.1	38.1
47.5°	1269.4	1036.2	85.2	66.2	63.9	48.2	42.6	35.9	28.0	25.8	25.8
50°	1480.2	1130.3	71.8	59.4	58.3	42.6	33.6	23.5	15.7	13.5	14.6
52.5°	1685.4	1218.9	63.9	52.7	51.6	37.0	24.7	12.3	6.7	6.7	6.7
55°	1858.1	1281.7	58.3	47.1	44.9	29.2	13.5	5.6	3.4	3.4	3.4
57.5°	2014.0	1317.6	52.7	41.5	35.9	20.2	5.6	2.2	2.2	1.1	1.1
60°	2156.4	1338.9	46.0	35.9	28.0	11.2	2.2	1.1	1.1	0.0	0.0
62.5°	2296.6	1354.6	39.2	29.2	21.3	4.5	1.1	1.1	0.0	0.0	0.0
65°	2403.1	1349.0	31.4	23.5	13.5	2.2	1.1	0.0	0.0	0.0	0.0
67.5°	2399.7	1272.8	23.5	17.9	6.7	1.1	0.0	0.0	0.0	0.0	0.0
70°	2146.3	1072.0	15.7	11.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1522.8	687.4	10.1	6.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	670.6	208.6	5.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	131.2	48.2	3.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.4	5.6	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	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)