

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: P265955

Luminaire Tested: **ARCH-AF24-60-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265955
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-AF24-60-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA 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: 4737.6 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 III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 64
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

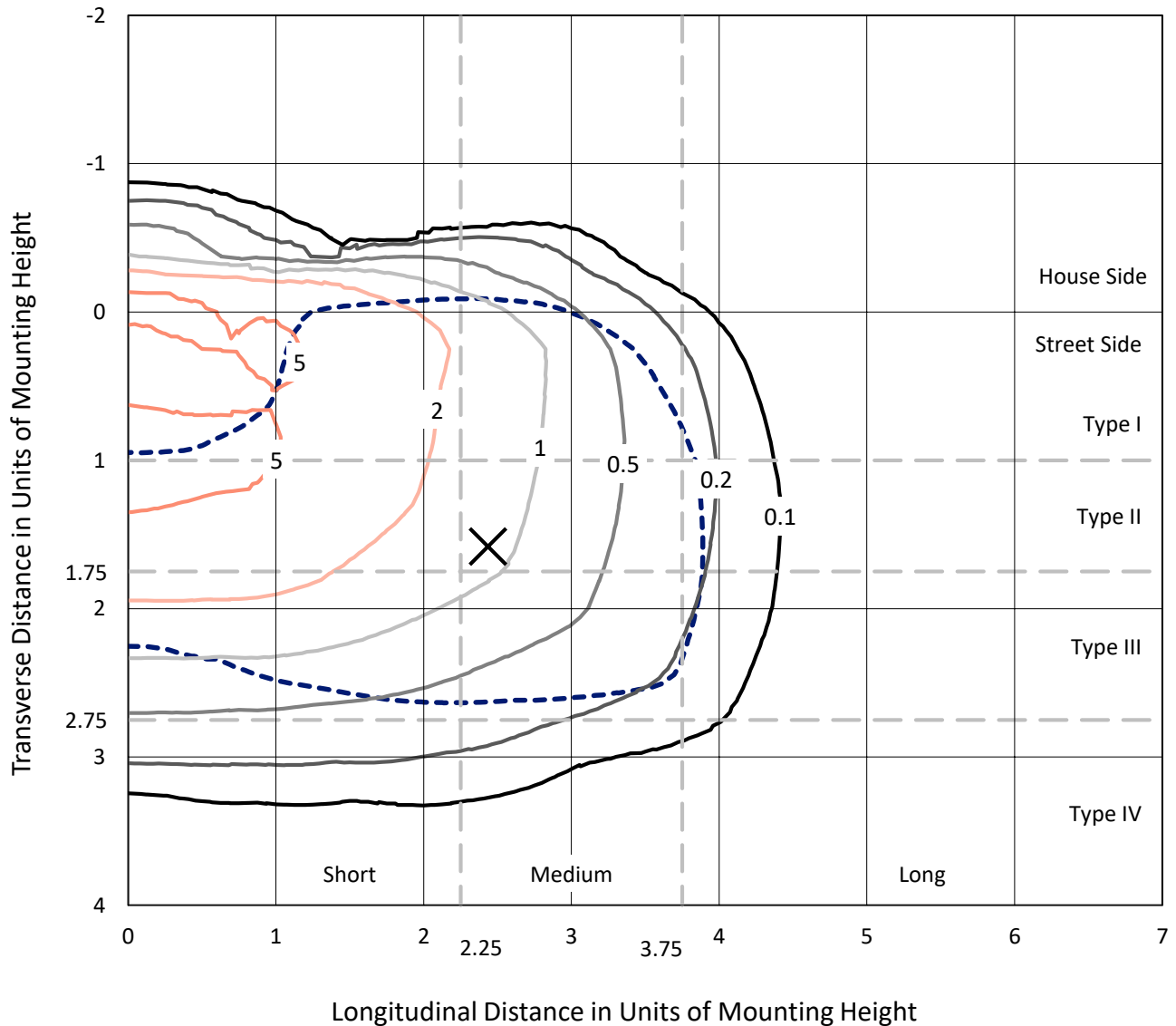


REPORT NUMBER: P265955

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

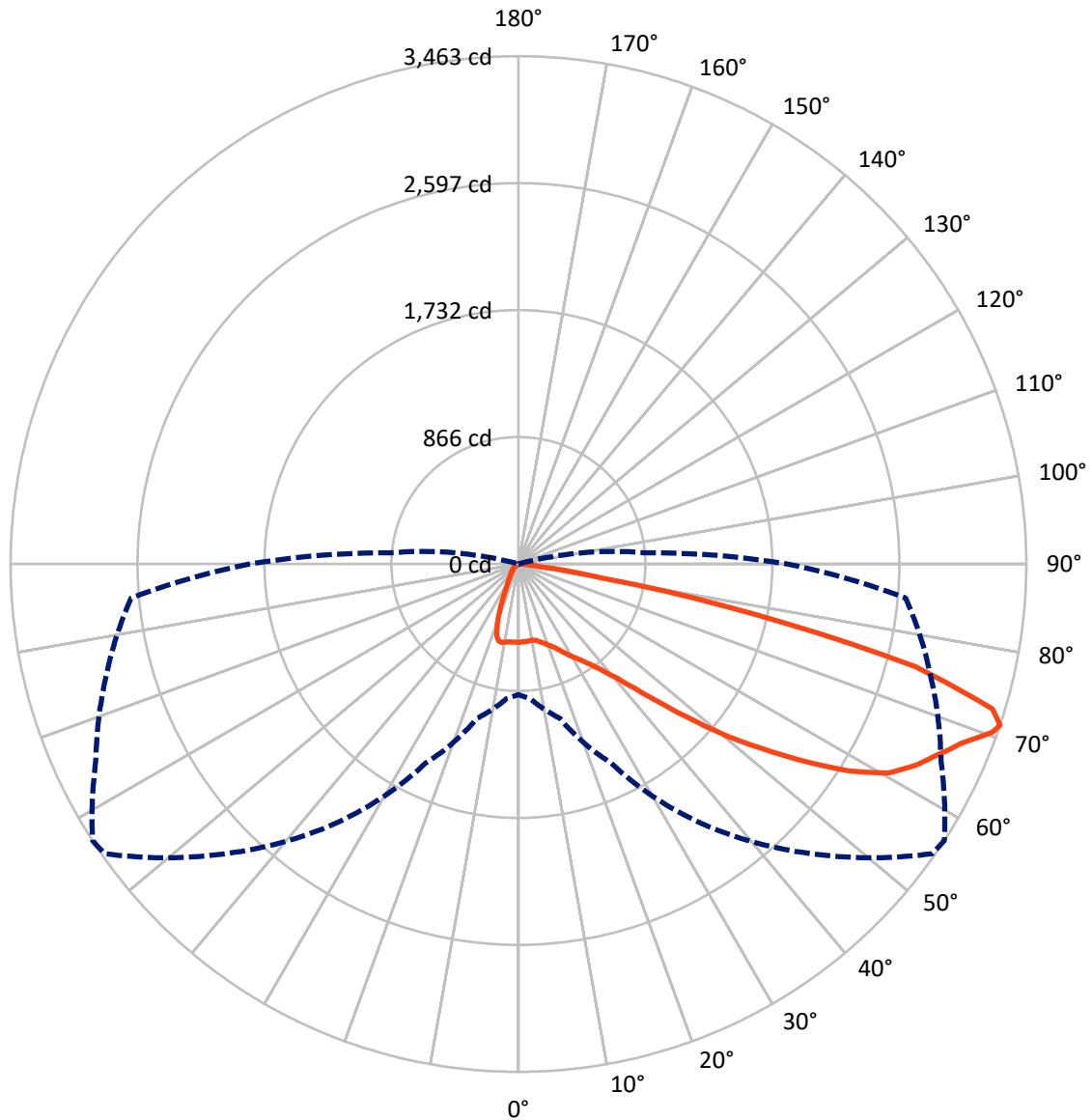


Based on 10 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P265955

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265955

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

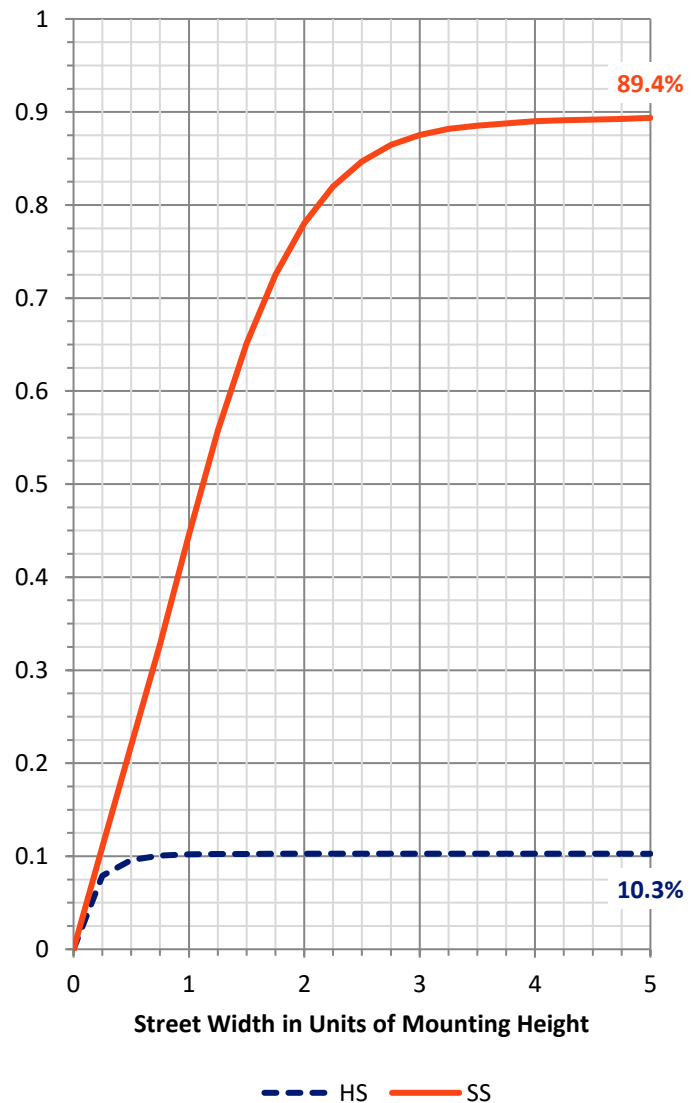
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	491.0	0.0	491.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4246.6	0.0	4246.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	4737.6	0.0	4737.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	1.1
10°-20°	134.4	2.8
20°-30°	209.7	4.4
30°-40°	354.5	7.5
40°-50°	688.5	14.5
50°-60°	1156.2	24.4
60°-70°	1379.8	29.1
70°-80°	727.2	15.3
80°-90°	37.0	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°	4737.6	100.0
0°-180°	4737.6	100.0

Coefficient of Utilization



REPORT NUMBER: P265955

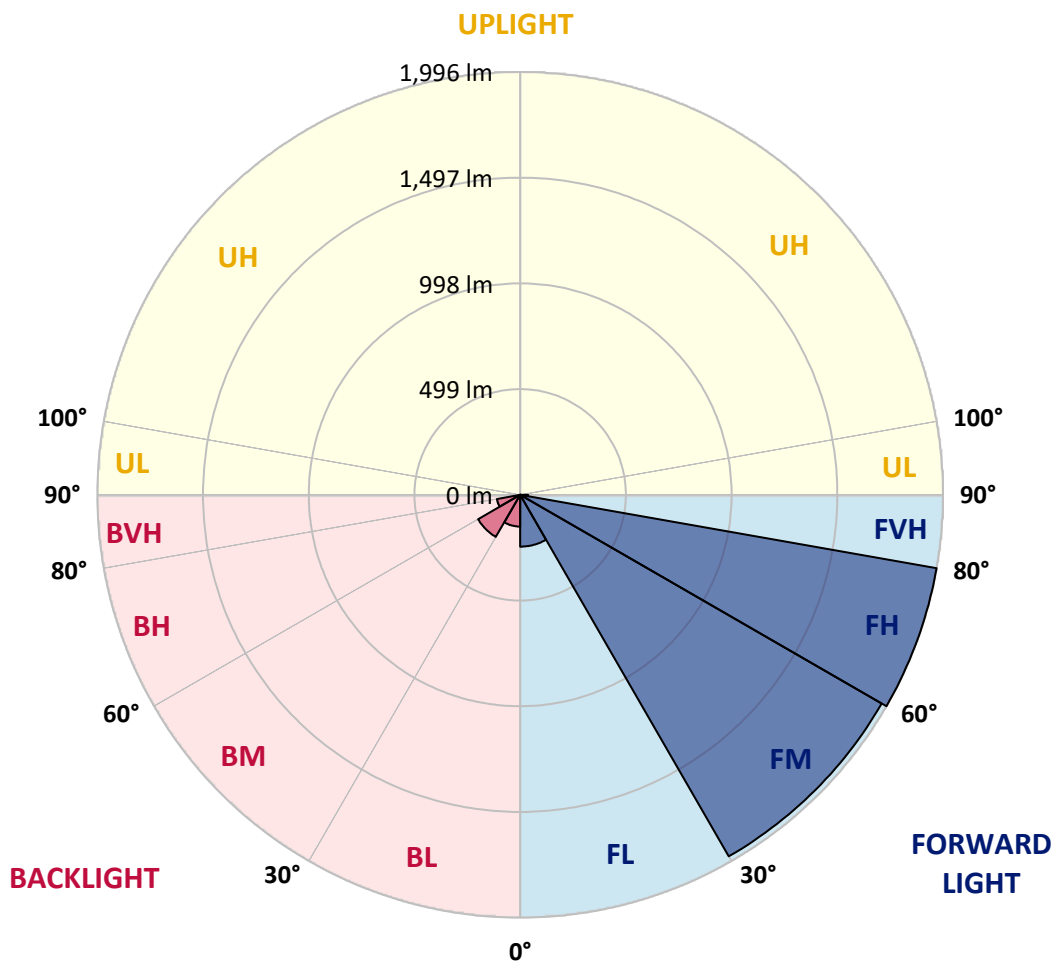
CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	244.6	5.2			
FM	(30°-60°)	1969.9	41.6			
FH	(60°-80°)	1995.5	42.1			G2/5000
FVH	(80°-90°)	36.6	0.8			G1/100
BL	(0°-30°)	149.9	3.2	B1/500		
BM	(30°-60°)	229.3	4.8	B1/1000		
BH	(60°-80°)	111.5	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





REPORT NUMBER: P265955

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4
2.5°	527.8	527.8	527.8	528.8	529.9	529.9	532.1	531.0	531.0	531.0	533.2
5°	513.3	514.5	515.5	517.8	522.2	525.5	531.0	531.0	532.1	534.3	535.4
7.5°	493.4	494.5	497.9	502.3	511.1	519.0	527.8	529.9	533.2	538.8	540.9
10°	481.3	483.6	488.0	493.4	503.4	513.3	524.4	527.8	537.6	547.5	553.0
12.5°	478.0	479.2	483.6	492.5	504.5	516.6	531.0	534.3	548.7	564.1	572.9
15°	483.6	484.6	486.8	496.9	511.1	526.5	545.4	549.8	567.4	585.1	596.1
17.5°	493.4	493.4	495.7	504.5	519.9	537.6	561.9	568.5	588.4	608.3	620.4
20°	500.0	500.0	503.4	512.3	529.9	553.0	581.8	590.6	612.7	634.8	645.8
22.5°	506.7	507.8	511.1	521.0	540.9	572.9	606.0	614.9	640.3	663.5	674.4
25°	525.5	524.4	525.5	534.3	557.5	597.3	639.2	650.3	676.8	702.1	707.7
27.5°	577.4	575.2	560.8	555.3	572.9	622.6	681.2	692.1	723.0	748.5	748.5
30°	696.5	692.1	656.9	611.6	597.3	645.8	720.9	736.3	776.0	798.1	791.5
32.5°	847.8	837.8	792.7	715.4	658.0	676.8	762.8	780.4	831.3	850.1	835.8
35°	1013.5	1012.3	956.1	856.7	775.0	740.7	816.9	837.8	902.0	918.4	895.3
37.5°	1188.9	1193.4	1155.8	1018.9	922.9	845.7	888.8	912.9	991.4	1011.2	989.2
40°	1384.4	1383.3	1368.8	1206.7	1100.7	994.7	992.4	1014.5	1109.4	1140.4	1109.4
42.5°	1631.6	1629.4	1577.6	1431.9	1315.9	1188.9	1143.7	1151.4	1257.4	1308.2	1262.9
45°	1883.3	1867.8	1808.3	1682.4	1579.8	1429.7	1343.5	1343.5	1434.1	1503.7	1432.9
47.5°	2023.5	2008.2	1983.8	1914.3	1883.3	1715.6	1588.7	1573.1	1643.8	1714.4	1615.2
50°	2207.9	2207.9	2147.2	2120.7	2173.7	2055.6	1859.0	1843.6	1877.8	1934.1	1803.8
52.5°	2353.6	2327.1	2284.1	2307.2	2458.5	2404.5	2129.5	2099.8	2126.2	2140.7	1968.4
55°	2414.4	2389.0	2385.7	2470.7	2704.6	2629.7	2406.6	2380.1	2378.0	2307.2	2111.8
57.5°	2426.5	2404.5	2446.4	2595.5	2944.3	2814.0	2682.6	2662.8	2601.0	2424.3	2258.7
60°	2323.8	2334.9	2436.5	2663.8	3085.6	2974.1	2915.5	2894.6	2752.1	2523.7	2422.1
62.5°	2113.1	2139.5	2329.3	2670.5	3033.7	3039.2	3044.7	3030.4	2869.1	2614.2	2586.6
65°	1863.4	1871.2	2099.8	2578.9	2943.1	3019.4	3139.7	3138.6	2958.6	2715.8	2772.1
67.5°	1535.7	1548.9	1746.5	2269.7	2762.1	3010.5	3264.4	3261.0	3060.2	2831.6	2882.4
70°	1142.6	1159.2	1319.3	1765.2	2358.1	2900.1	3427.8	3430.0	3167.2	2920.0	2806.2
71°	890.8	920.8	1088.4	1499.2	2151.6	2788.6	3443.3	3463.1	3179.5	2907.9	2649.6
72.5°	437.1	472.5	683.3	1055.4	1770.7	2539.1	3341.7	3380.3	3103.3	2756.5	2265.3
75°	113.7	120.4	204.3	431.6	949.4	1682.4	2694.7	2793.0	2537.0	2098.6	1384.4
77.5°	71.8	74.0	96.1	167.9	355.5	639.2	1583.2	1631.6	1449.5	1063.1	488.0
80°	50.8	51.9	60.7	108.2	207.6	186.6	569.6	590.6	524.4	281.4	87.2
82.5°	30.9	30.9	44.1	69.6	128.1	101.6	150.1	160.1	141.4	78.4	28.7
85°	17.6	18.8	27.6	47.5	60.7	49.6	56.4	59.6	60.7	51.9	12.1
87.5°	14.4	15.5	24.3	39.7	33.1	24.3	24.3	25.4	26.5	30.9	5.5
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: P265955

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4	535.4
2.5°	533.2	533.2	534.3	533.2	533.2	533.2	534.3	534.3	534.3	536.5	537.6
5°	535.4	535.4	535.4	534.3	533.2	533.2	535.4	536.5	536.5	539.8	539.8
7.5°	540.9	540.9	538.8	536.5	534.3	531.0	532.1	533.2	532.1	533.2	533.2
10°	553.0	553.0	549.8	545.4	538.8	528.8	515.5	499.0	483.6	478.0	475.8
12.5°	572.9	571.9	565.3	557.5	543.1	508.9	459.3	400.7	352.1	338.9	334.4
15°	595.0	592.8	585.1	571.9	533.2	442.7	338.9	263.8	217.5	206.4	204.3
17.5°	618.3	614.9	603.9	577.4	488.0	329.0	218.6	165.6	140.1	138.0	139.1
20°	642.5	638.1	622.6	566.3	394.1	219.6	141.4	128.1	125.9	125.9	127.0
22.5°	670.0	664.6	643.6	526.5	287.0	145.7	121.5	120.4	119.3	118.1	118.1
25°	702.1	695.5	663.5	454.8	197.5	119.3	115.9	112.6	110.4	108.2	107.1
27.5°	740.7	731.8	678.8	366.5	135.7	111.5	109.4	103.8	99.4	95.0	95.0
30°	779.4	768.4	674.4	276.0	110.4	103.8	99.4	92.7	86.1	81.7	80.6
32.5°	820.2	809.3	645.8	185.5	100.5	95.0	89.4	79.5	71.8	66.3	65.1
35°	881.0	872.2	589.5	122.6	90.5	83.9	76.1	66.3	56.4	50.8	49.6
37.5°	971.4	960.5	519.9	93.9	79.5	69.6	62.9	51.9	42.0	36.4	35.4
40°	1092.9	1059.8	437.1	82.9	69.6	57.4	48.6	37.5	29.9	26.5	26.5
42.5°	1234.2	1155.8	347.7	75.1	61.9	47.5	35.4	25.4	21.0	19.9	19.9
45°	1384.4	1245.3	258.4	69.6	54.1	37.5	25.4	17.6	15.5	14.4	14.4
47.5°	1538.9	1318.2	179.9	62.9	45.3	28.7	17.6	13.2	11.0	9.9	9.9
50°	1683.6	1365.7	127.0	56.4	38.6	21.0	13.2	9.9	7.7	7.7	7.7
52.5°	1784.0	1361.2	91.6	48.6	29.9	14.4	8.9	6.6	6.6	6.6	6.6
55°	1872.2	1344.7	71.8	42.0	23.1	9.9	6.6	5.5	5.5	4.4	4.4
57.5°	1947.3	1318.2	60.7	34.2	16.6	7.7	4.4	4.4	3.4	3.4	3.4
60°	2011.5	1285.0	50.8	28.7	11.0	5.5	3.4	2.2	2.2	1.1	2.2
62.5°	2098.6	1264.0	44.1	22.1	7.7	3.4	2.2	1.1	1.1	0.0	0.0
65°	2162.7	1224.3	37.5	15.5	4.4	2.2	1.1	1.1	0.0	0.0	0.0
67.5°	2164.8	1152.5	27.6	8.9	3.4	2.2	1.1	0.0	0.0	0.0	0.0
70°	1990.5	982.6	17.6	4.4	2.2	1.1	1.1	0.0	0.0	0.0	0.0
71°	1830.3	869.9	14.4	3.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1508.1	639.2	11.0	3.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0
75°	831.3	231.9	5.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	266.1	70.6	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	45.3	11.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.5	4.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.4	2.2	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)