

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: P214926

Luminaire Tested: **ARCH-AF24-50-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214926
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-AF24-50-D-U-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA 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: 4129 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - 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

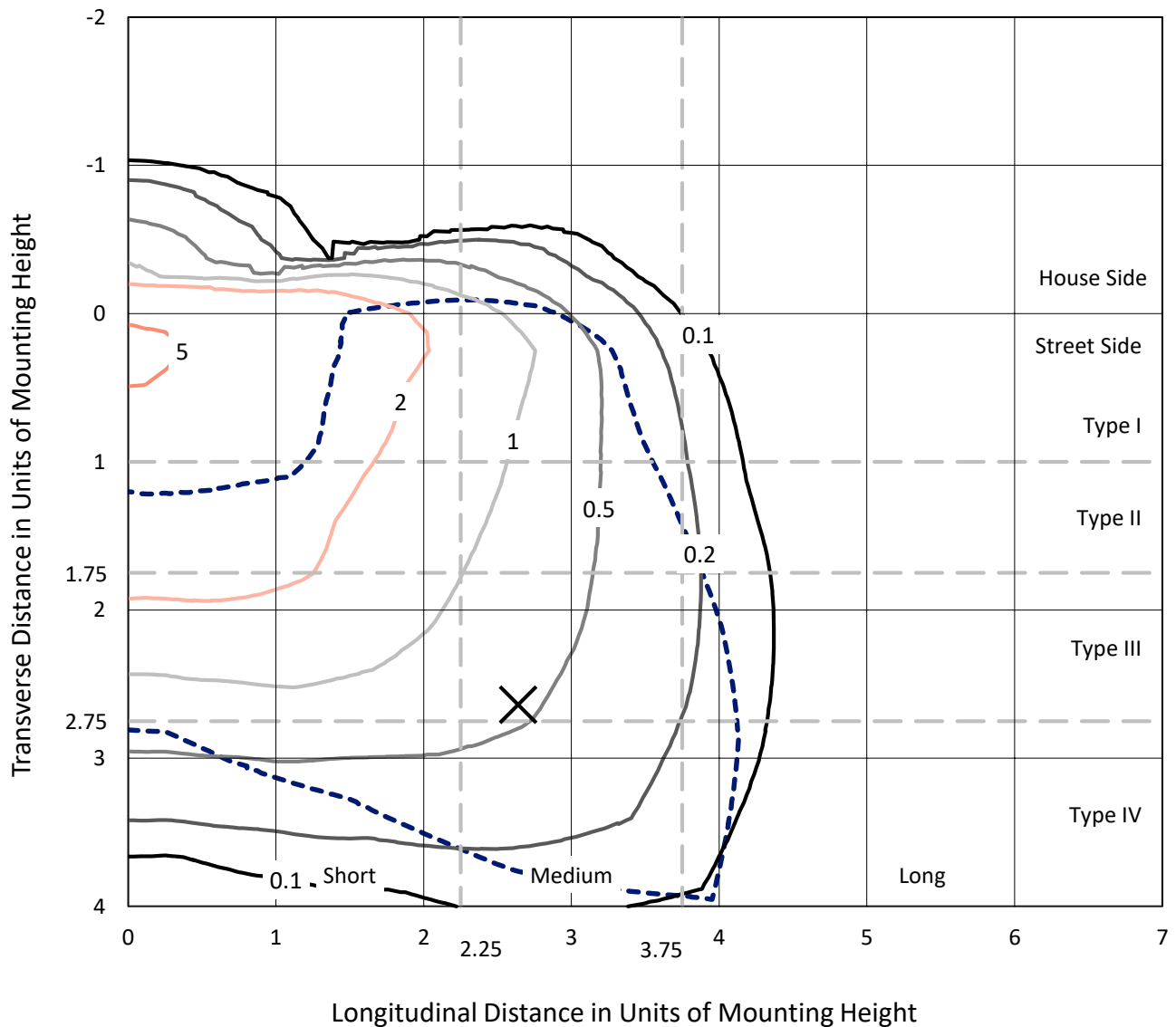


REPORT NUMBER: P214926

CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

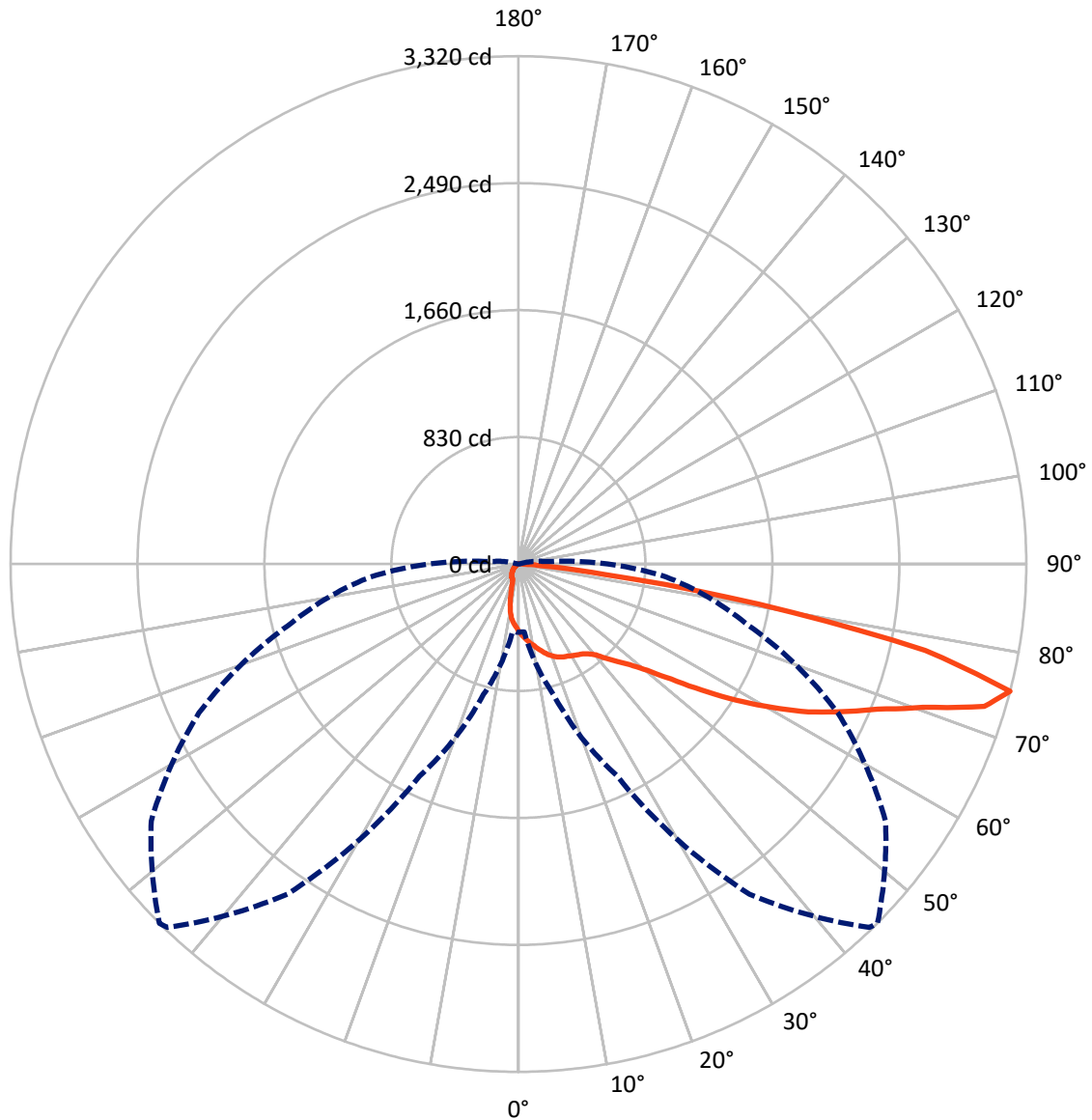


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214926

CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214926

CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

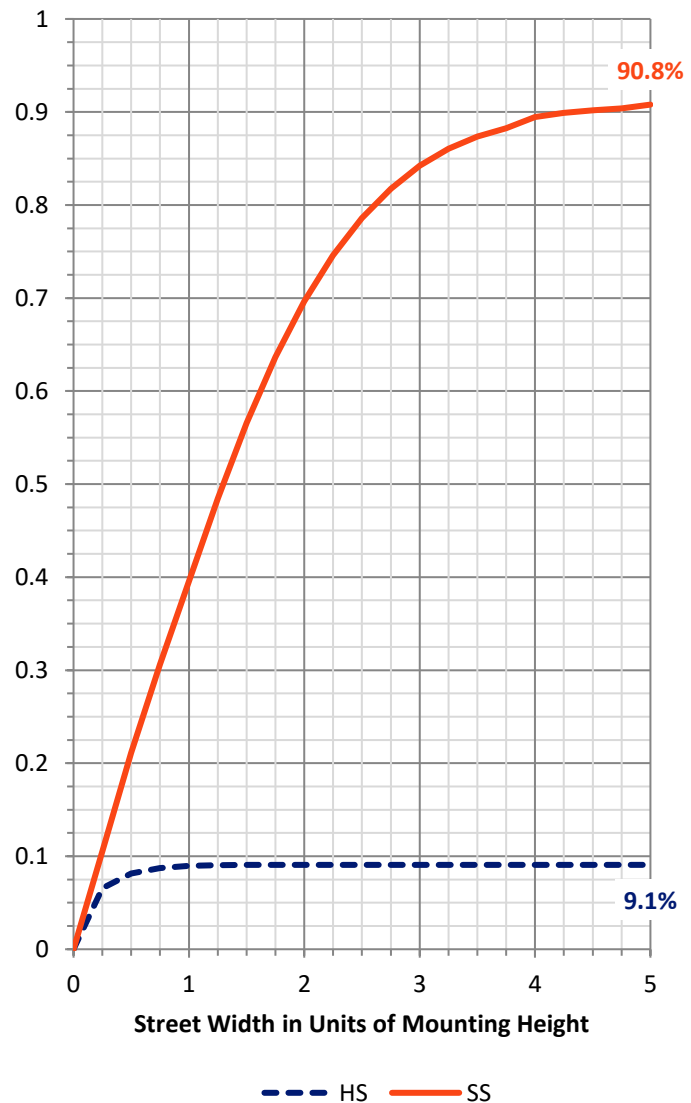
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	377.7	0.0	377.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	3751.3	0.0	3751.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	4129.0	0.0	4129.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	1.0
10°-20°	118.1	2.9
20°-30°	195.6	4.7
30°-40°	283.0	6.9
40°-50°	463.4	11.2
50°-60°	825.7	20.0
60°-70°	1213.9	29.4
70°-80°	915.8	22.2
80°-90°	71.9	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°	4129.0	100.0
0°-180°	4129.0	100.0



REPORT NUMBER: P214926

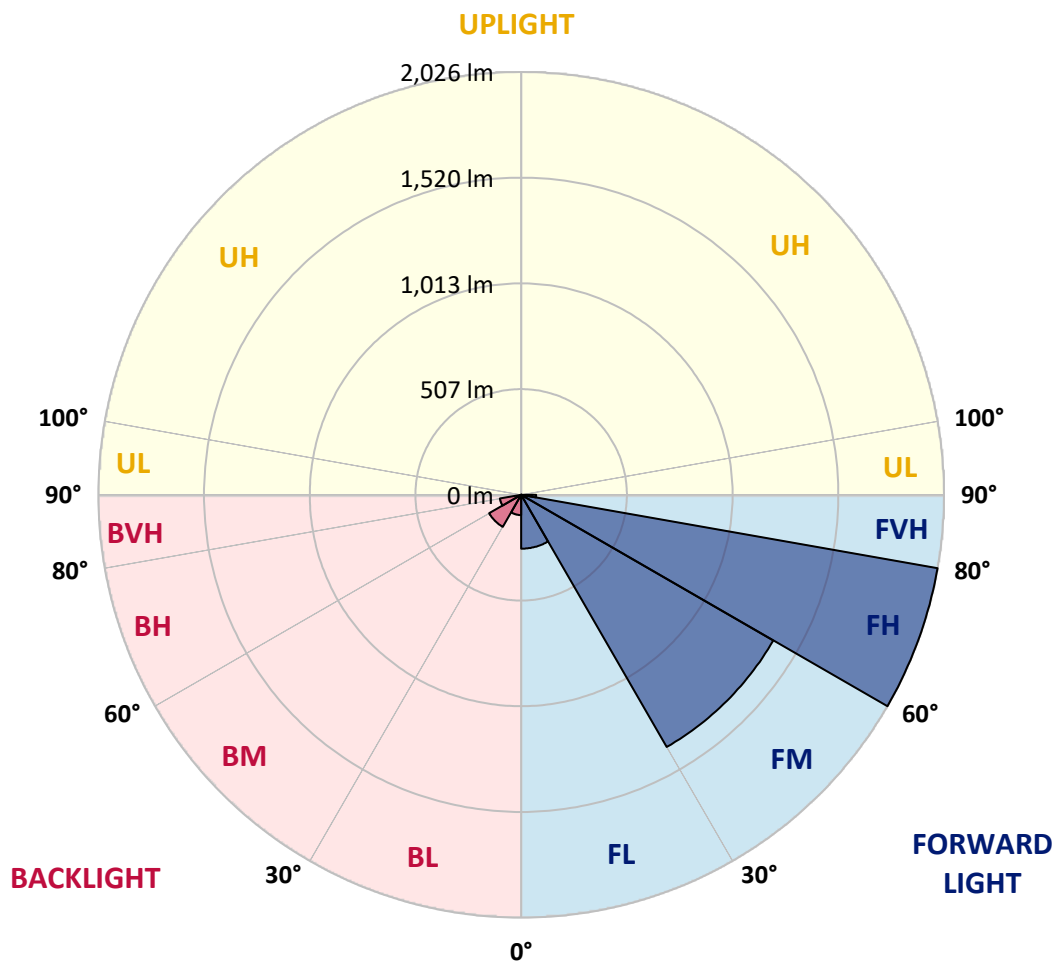
CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	258.3	6.3			
FM	(30°-60°)	1395.2	33.8			
FH	(60°-80°)	2026.2	49.1			G2/5000
FVH	(80°-90°)	71.7	1.7			G1/100
BL	(0°-30°)	97.1	2.4	B0/110		
BM	(30°-60°)	177.0	4.3	B0/220		
BH	(60°-80°)	103.5	2.5	B0/110		G0/110
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: B0-U0-G2

Type IV Medium





REPORT NUMBER: P214926

CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6
2.5°	479.7	479.7	478.7	477.8	472.9	468.0	467.0	464.1	455.3	449.4	443.6
5°	519.8	520.8	518.8	513.9	503.2	492.4	491.4	483.6	467.0	455.3	442.6
7.5°	557.9	559.8	555.0	546.2	533.5	517.8	516.9	502.2	480.7	464.1	445.5
10°	590.1	590.1	583.3	572.5	558.9	542.3	540.3	523.7	499.3	478.7	454.3
12.5°	625.3	624.3	614.6	599.9	584.3	568.6	567.7	547.1	523.7	497.3	467.0
15°	657.5	655.6	642.9	629.2	612.6	596.0	595.0	574.5	550.1	518.8	485.6
17.5°	675.1	674.2	662.4	648.7	635.1	622.4	621.4	599.9	573.5	541.3	504.1
20°	678.1	679.0	669.3	657.5	649.7	642.9	642.9	623.3	595.0	560.8	523.7
22.5°	679.0	682.0	675.1	659.5	657.5	658.5	660.5	644.8	615.5	583.3	544.2
25°	685.9	689.8	684.9	666.3	664.4	671.2	673.2	666.3	640.0	607.7	567.7
27.5°	699.6	703.5	699.6	676.1	673.2	680.0	682.0	685.9	666.3	631.2	592.1
30°	726.9	727.9	719.1	689.8	683.9	692.7	695.6	706.4	690.8	653.6	615.5
32.5°	774.8	765.0	738.6	699.6	694.7	704.4	707.4	719.1	713.2	675.1	640.0
35°	872.5	821.7	761.1	713.2	708.3	718.1	722.0	738.6	741.6	705.4	670.2
37.5°	871.5	825.6	813.9	739.6	732.8	739.6	744.5	765.0	776.7	745.5	714.2
40°	933.1	913.5	913.5	789.4	767.0	776.7	781.6	802.1	822.7	798.2	766.0
42.5°	1126.5	1113.8	1100.1	885.2	814.8	842.2	845.1	857.8	882.3	874.4	836.3
45°	1342.4	1330.7	1278.0	1047.4	896.9	901.8	908.6	929.2	964.3	979.0	934.0
47.5°	1511.5	1499.7	1454.8	1242.8	1024.9	981.9	981.9	1022.0	1076.7	1113.8	1070.8
50°	1647.3	1633.6	1606.2	1450.9	1235.0	1097.2	1091.3	1138.2	1219.3	1277.0	1247.7
52.5°	1779.2	1739.1	1722.5	1665.8	1472.4	1264.3	1248.6	1281.9	1394.2	1465.5	1441.1
55°	1867.1	1861.2	1843.7	1863.2	1721.5	1467.5	1453.8	1460.7	1601.4	1649.2	1618.9
57.5°	1949.2	1948.2	1987.3	2078.1	1993.1	1700.0	1678.5	1667.8	1801.6	1789.9	1816.3
60°	2050.8	2033.2	2124.1	2254.0	2242.3	1926.7	1902.3	1880.8	1955.0	1921.8	2052.7
62.5°	2055.7	2050.8	2235.5	2422.1	2489.5	2157.3	2129.0	2051.8	2088.9	2050.8	2278.4
65°	1869.1	1893.5	2282.3	2511.0	2696.6	2359.5	2325.3	2205.2	2208.1	2182.7	2544.2
67.5°	1827.1	1839.8	2153.4	2606.7	2846.1	2563.7	2531.5	2382.0	2346.8	2348.8	2701.5
70°	1722.5	1742.0	1993.1	2599.9	2964.3	2836.3	2804.1	2641.9	2556.9	2462.1	2580.3
72.5°	1316.1	1349.3	1679.5	2279.4	2932.1	3192.9	3184.2	2971.2	2640.9	2260.9	1952.1
75°	445.5	444.6	882.3	1531.0	2634.1	3302.4	3320.0	2930.1	2303.8	1559.3	969.2
77.5°	95.7	96.7	181.7	620.4	1749.9	2651.7	2719.1	2210.0	1486.1	694.7	221.8
80°	46.9	47.9	75.2	164.1	699.6	1487.0	1592.6	1136.3	549.1	138.7	37.1
82.5°	23.4	24.4	39.1	87.0	258.9	528.6	564.7	418.2	157.3	78.2	18.6
85°	8.8	8.8	19.5	51.8	118.2	124.1	152.4	121.2	94.8	63.5	4.9
87.5°	2.0	2.0	10.7	25.4	52.8	39.1	39.1	37.1	57.6	43.0	2.0
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: P214926

CATALOG NUMBER: ARCH-AF24-50-D-U-T4W-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6
2.5°	440.6	436.7	429.9	423.1	418.2	412.3	409.4	406.4	405.5	404.5	406.4
5°	435.8	429.9	417.2	406.4	396.7	388.9	383.0	377.1	374.2	372.2	373.2
7.5°	435.8	427.0	408.4	391.8	376.2	359.5	342.9	330.2	320.5	314.6	315.6
10°	440.6	428.9	404.5	382.0	352.7	317.5	281.4	254.0	235.5	224.7	224.7
12.5°	451.4	435.8	405.5	370.3	320.5	258.9	204.2	171.0	157.3	149.5	150.5
15°	466.0	447.5	410.4	354.7	275.5	192.5	142.6	121.2	121.2	123.1	124.1
17.5°	482.7	462.1	414.3	331.2	217.9	137.8	112.4	110.4	113.3	118.2	118.2
20°	499.3	476.8	416.2	294.1	163.2	109.4	106.5	106.5	108.5	113.3	114.3
22.5°	519.8	495.4	414.3	248.2	122.1	103.6	102.6	102.6	102.6	108.5	108.5
25°	541.3	516.9	406.4	199.3	103.6	99.7	98.7	97.7	97.7	102.6	103.6
27.5°	565.7	539.3	387.9	152.4	97.7	95.7	94.8	92.8	92.8	96.7	96.7
30°	590.1	564.7	359.5	115.3	92.8	91.8	89.9	87.9	86.0	89.9	89.9
32.5°	616.5	591.1	322.4	91.8	86.0	86.0	85.0	82.1	80.1	82.1	83.0
35°	651.7	621.4	280.4	80.1	77.2	77.2	77.2	76.2	72.3	74.3	74.3
37.5°	698.6	663.4	231.6	74.3	70.3	68.4	68.4	68.4	65.5	66.4	66.4
40°	758.2	712.3	184.7	69.4	65.5	60.6	58.6	59.6	57.6	57.6	56.7
42.5°	839.3	765.0	138.7	65.5	61.6	54.7	50.8	49.8	47.9	46.9	46.9
45°	955.5	829.5	99.7	61.6	58.6	47.9	44.0	41.0	36.2	33.2	33.2
47.5°	1106.0	902.8	74.3	57.6	55.7	42.0	37.1	31.3	24.4	22.5	22.5
50°	1289.7	984.8	62.5	51.8	50.8	37.1	29.3	20.5	13.7	11.7	12.7
52.5°	1468.5	1062.0	55.7	45.9	44.9	32.2	21.5	10.7	5.9	5.9	5.9
55°	1618.9	1116.7	50.8	41.0	39.1	25.4	11.7	4.9	2.9	2.9	2.9
57.5°	1754.8	1148.0	45.9	36.2	31.3	17.6	4.9	2.0	2.0	1.0	1.0
60°	1878.8	1166.6	40.1	31.3	24.4	9.8	2.0	1.0	1.0	0.0	0.0
62.5°	2001.0	1180.3	34.2	25.4	18.6	3.9	1.0	1.0	0.0	0.0	0.0
65°	2093.8	1175.4	27.4	20.5	11.7	2.0	1.0	0.0	0.0	0.0	0.0
67.5°	2090.9	1108.9	20.5	15.6	5.9	1.0	0.0	0.0	0.0	0.0	0.0
70°	1870.0	934.0	13.7	9.8	2.0	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1326.8	598.9	8.8	5.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	584.3	181.7	4.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	114.3	42.0	2.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.4	4.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	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)