

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: P214933

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214933
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-AF16-30-D-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2735.4 lumens
Efficiency: N/A
Efficacy: 85.5 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 - G1

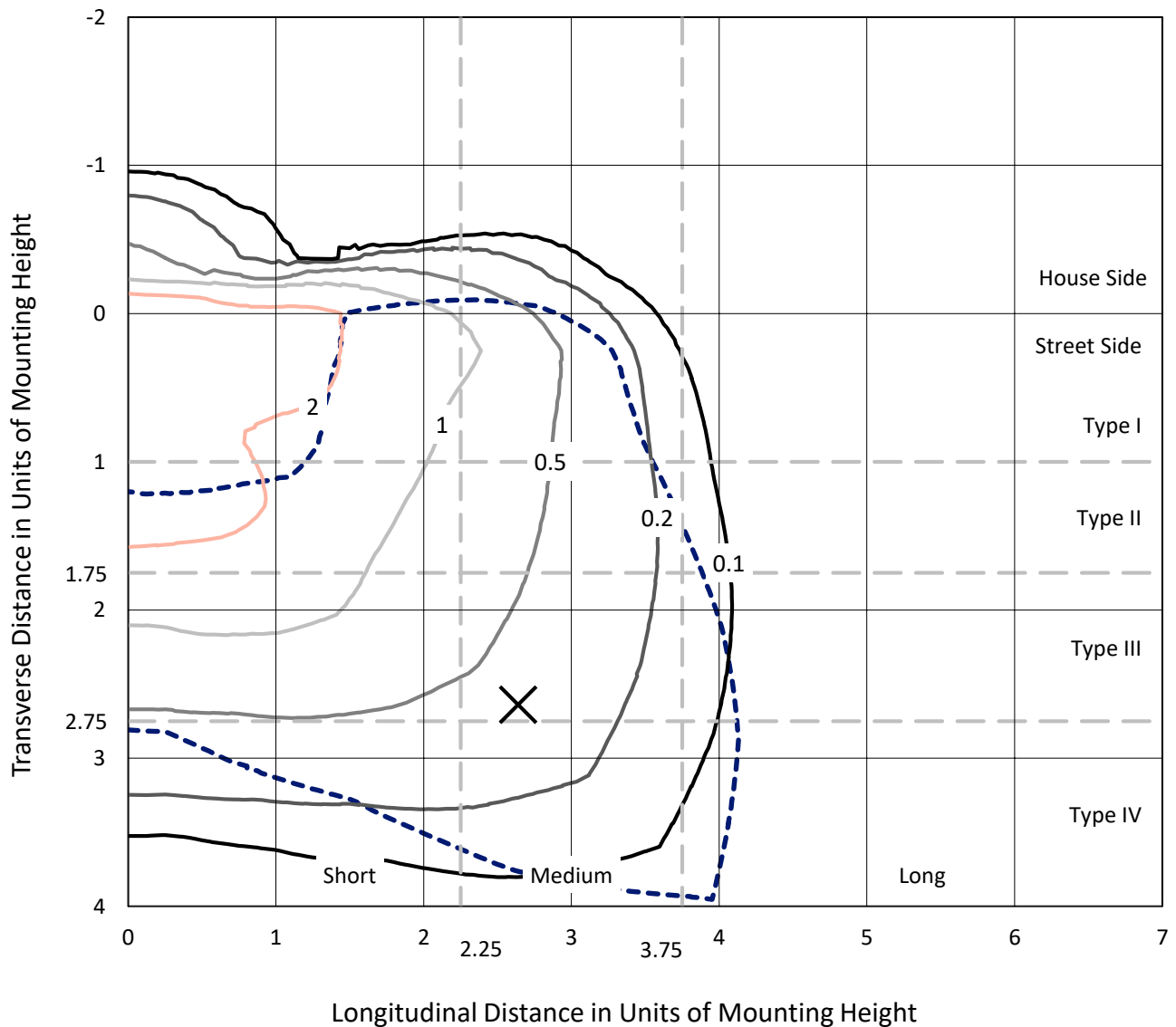
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214933
 CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

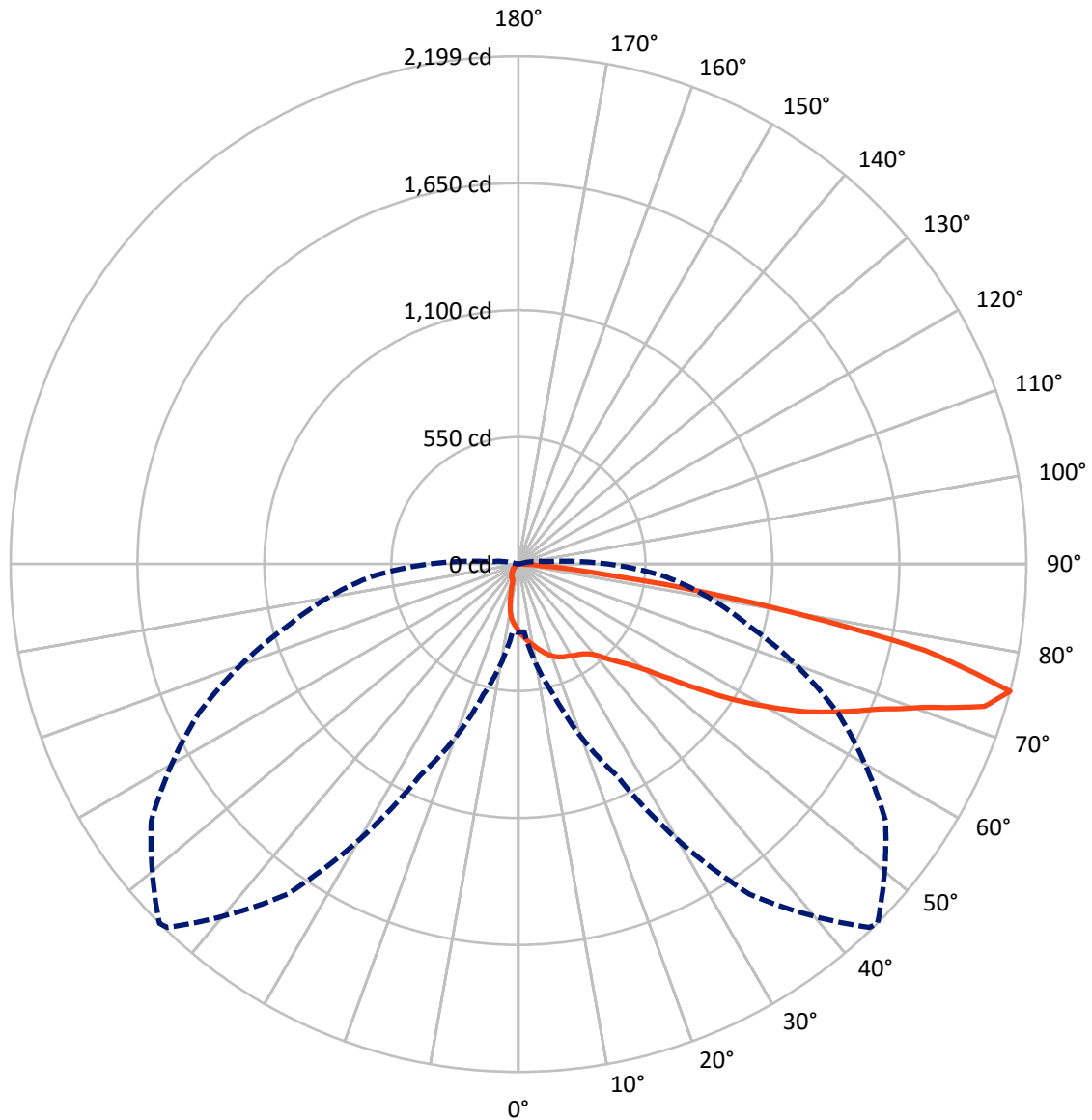
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214933
CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214933

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

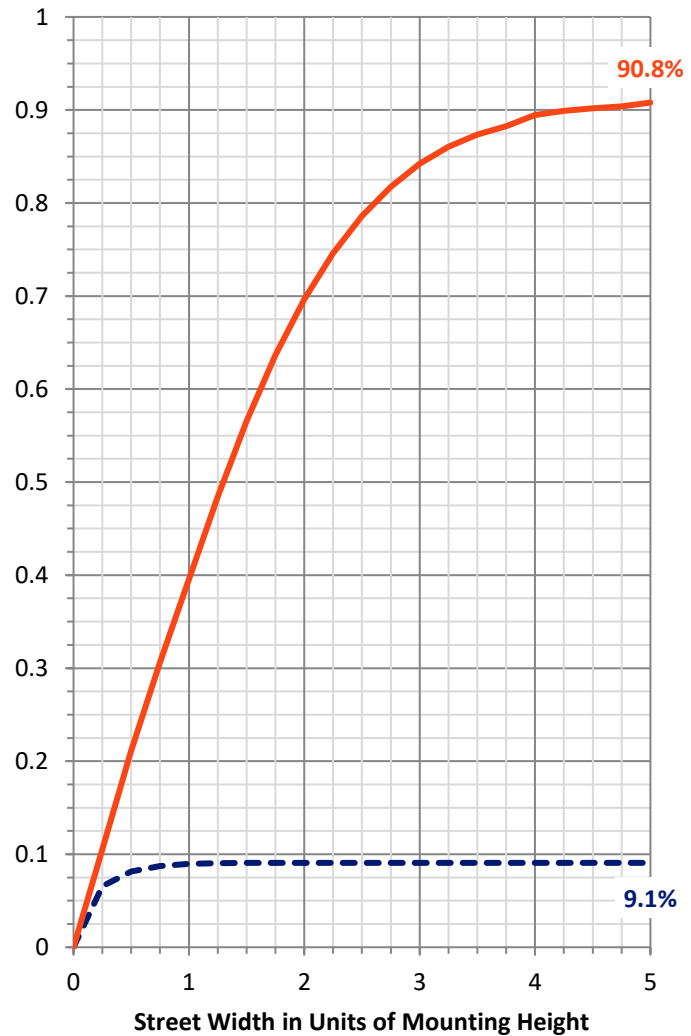
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	250.2	0.0	250.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2485.2	0.0	2485.2
	% Fixture	90.9	0.0	90.9
Total	Lumens	2735.4	0.0	2735.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	1.0
10°-20°	78.2	2.9
20°-30°	129.5	4.7
30°-40°	187.5	6.9
40°-50°	307.0	11.2
50°-60°	547.0	20.0
60°-70°	804.2	29.4
70°-80°	606.7	22.2
80°-90°	47.6	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°	2735.4	100.0
0°-180°	2735.4	100.0



REPORT NUMBER: P214933

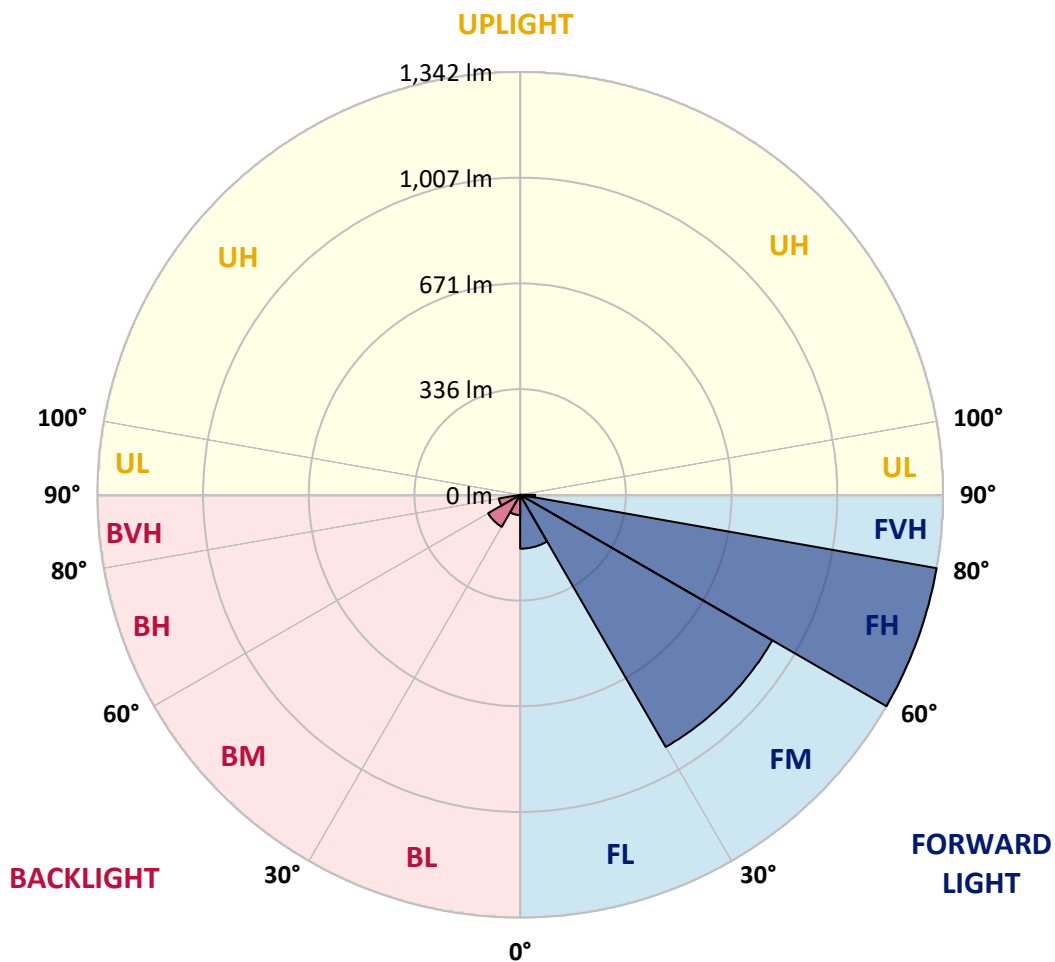
CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	171.1	6.3			
FM	(30°-60°)	924.3	33.8			
FH	(60°-80°)	1342.4	49.1			G1/1800
FVH	(80°-90°)	47.5	1.7			G1/100
BL	(0°-30°)	64.3	2.4	B0/110		
BM	(30°-60°)	117.3	4.3	B0/220		
BH	(60°-80°)	68.5	2.5	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Medium





REPORT NUMBER: P214933

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6
2.5°	317.8	317.8	317.1	316.5	313.2	310.1	309.4	307.5	301.7	297.8	293.9
5°	344.3	345.0	343.7	340.4	333.4	326.2	325.6	320.4	309.4	301.7	293.2
7.5°	369.6	370.9	367.6	361.8	353.4	343.1	342.4	332.7	318.4	307.5	295.1
10°	391.0	391.0	386.4	379.3	370.2	359.3	357.9	346.9	330.7	317.1	301.0
12.5°	414.3	413.6	407.1	397.4	387.1	376.8	376.0	362.4	346.9	329.5	309.4
15°	435.6	434.3	425.9	416.9	405.8	394.9	394.1	380.6	364.4	343.7	321.7
17.5°	447.2	446.6	438.8	429.7	420.7	412.4	411.6	397.4	379.9	358.5	334.0
20°	449.2	449.9	443.3	435.6	430.5	425.9	425.9	413.0	394.1	371.5	346.9
22.5°	449.9	451.8	447.2	436.9	435.6	436.3	437.5	427.2	407.7	386.4	360.5
25°	454.4	457.0	453.8	441.4	440.2	444.7	446.0	441.4	423.9	402.6	376.0
27.5°	463.4	466.1	463.4	448.0	446.0	450.5	451.8	454.4	441.4	418.2	392.2
30°	481.6	482.2	476.4	457.0	453.1	458.9	460.8	468.0	457.6	433.0	407.7
32.5°	513.3	506.8	489.4	463.4	460.2	466.7	468.6	476.4	472.5	447.2	423.9
35°	578.0	544.3	504.2	472.5	469.2	475.8	478.3	489.4	491.3	467.3	444.1
37.5°	577.4	547.0	539.2	490.0	485.5	490.0	493.2	506.8	514.5	493.9	473.1
40°	618.2	605.2	605.2	523.0	508.1	514.5	517.8	531.4	545.0	528.8	507.5
42.5°	746.3	737.9	728.9	586.5	539.8	557.9	559.9	568.2	584.5	579.3	554.0
45°	889.4	881.6	846.6	693.9	594.2	597.4	601.9	615.5	638.8	648.6	618.8
47.5°	1001.3	993.6	963.8	823.3	678.9	650.5	650.5	677.0	713.3	737.9	709.4
50°	1091.3	1082.2	1064.1	961.2	818.2	726.9	723.0	754.0	807.8	846.0	826.5
52.5°	1178.6	1152.1	1141.1	1103.6	975.4	837.6	827.2	849.3	923.6	970.9	954.7
55°	1237.0	1233.1	1221.4	1234.3	1140.5	972.2	963.1	967.6	1060.9	1092.6	1072.6
57.5°	1291.3	1290.7	1316.5	1376.7	1320.4	1126.3	1111.9	1104.9	1193.6	1185.8	1203.3
60°	1358.6	1346.9	1407.2	1493.2	1485.4	1276.4	1260.2	1246.0	1295.2	1273.2	1359.9
62.5°	1361.9	1358.6	1480.9	1604.6	1649.2	1429.2	1410.3	1359.3	1383.8	1358.6	1509.5
65°	1238.2	1254.4	1512.0	1663.4	1786.5	1563.2	1540.5	1460.9	1462.8	1445.9	1685.5
67.5°	1210.4	1218.8	1426.6	1726.9	1885.5	1698.4	1677.0	1578.0	1554.7	1556.0	1789.7
70°	1141.1	1154.1	1320.4	1722.3	1963.8	1879.0	1857.7	1750.2	1693.9	1631.1	1709.5
72.5°	871.9	893.9	1112.7	1510.1	1942.5	2115.3	2109.4	1968.4	1749.6	1497.8	1293.2
75°	295.1	294.5	584.5	1014.3	1745.1	2187.8	2199.4	1941.2	1526.2	1033.1	642.1
77.5°	63.4	64.0	120.4	411.0	1159.2	1756.7	1801.3	1464.1	984.5	460.2	146.9
80°	31.1	31.7	49.8	108.7	463.4	985.1	1055.1	752.8	363.8	91.9	24.6
82.5°	15.5	16.2	25.9	57.6	171.5	350.2	374.1	277.0	104.2	51.8	12.3
85°	5.8	5.8	13.0	34.3	78.4	82.2	101.0	80.3	62.8	42.0	3.3
87.5°	1.3	1.3	7.2	16.9	35.0	25.9	25.9	24.6	38.2	28.4	1.3
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: P214933

CATALOG NUMBER: ARCH-AF16-30-D-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6	292.6
2.5°	292.0	289.3	284.8	280.3	277.0	273.1	271.2	269.2	268.6	268.0	269.2
5°	288.7	284.8	276.4	269.2	262.8	257.6	253.7	249.8	247.9	246.6	247.2
7.5°	288.7	282.8	270.6	259.5	249.2	238.1	227.2	218.8	212.3	208.4	209.1
10°	292.0	284.2	268.0	253.1	233.6	210.3	186.4	168.3	156.0	148.8	148.8
12.5°	299.0	288.7	268.6	245.3	212.3	171.5	135.2	113.2	104.2	99.0	99.6
15°	308.7	296.5	271.9	235.0	182.5	127.5	94.5	80.3	80.3	81.5	82.2
17.5°	319.8	306.2	274.5	219.4	144.3	91.2	74.5	73.1	75.1	78.4	78.4
20°	330.7	315.9	275.7	194.9	108.1	72.5	70.6	70.6	71.8	75.1	75.7
22.5°	344.3	328.2	274.5	164.4	80.9	68.6	67.9	67.9	67.9	71.8	71.8
25°	358.5	342.4	269.2	132.1	68.6	66.0	65.4	64.8	64.8	67.9	68.6
27.5°	374.8	357.3	257.0	101.0	64.8	63.4	62.8	61.5	61.5	64.0	64.0
30°	391.0	374.1	238.1	76.4	61.5	60.9	59.5	58.2	57.0	59.5	59.5
32.5°	408.5	391.6	213.6	60.9	57.0	57.0	56.3	54.4	53.1	54.4	55.0
35°	431.7	411.6	185.8	53.1	51.1	51.1	51.1	50.5	47.9	49.2	49.2
37.5°	462.8	439.5	153.4	49.2	46.6	45.3	45.3	45.3	43.4	44.0	44.0
40°	502.3	471.9	122.3	45.9	43.4	40.1	38.9	39.5	38.2	38.2	37.5
42.5°	556.0	506.8	91.9	43.4	40.8	36.2	33.7	33.0	31.7	31.1	31.1
45°	633.0	549.5	66.0	40.8	38.9	31.7	29.2	27.2	23.9	22.0	22.0
47.5°	732.7	598.1	49.2	38.2	36.9	27.8	24.6	20.7	16.2	14.9	14.9
50°	854.4	652.4	41.4	34.3	33.7	24.6	19.4	13.6	9.1	7.8	8.4
52.5°	972.8	703.6	36.9	30.4	29.8	21.4	14.2	7.2	3.9	3.9	3.9
55°	1072.6	739.8	33.7	27.2	25.9	16.9	7.8	3.3	1.9	1.9	1.9
57.5°	1162.5	760.6	30.4	23.9	20.7	11.7	3.3	1.3	1.3	0.6	0.6
60°	1244.7	772.8	26.5	20.7	16.2	6.4	1.3	0.6	0.6	0.0	0.0
62.5°	1325.6	781.9	22.6	16.9	12.3	2.6	0.6	0.6	0.0	0.0	0.0
65°	1387.1	778.7	18.1	13.6	7.8	1.3	0.6	0.0	0.0	0.0	0.0
67.5°	1385.2	734.7	13.6	10.3	3.9	0.6	0.0	0.0	0.0	0.0	0.0
70°	1238.9	618.8	9.1	6.4	1.3	0.6	0.0	0.0	0.0	0.0	0.0
72.5°	879.0	396.8	5.8	3.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	387.1	120.4	3.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	75.7	27.8	1.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.1	3.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	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)