

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: P265879

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265879
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
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-T2R-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2546.9 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full 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

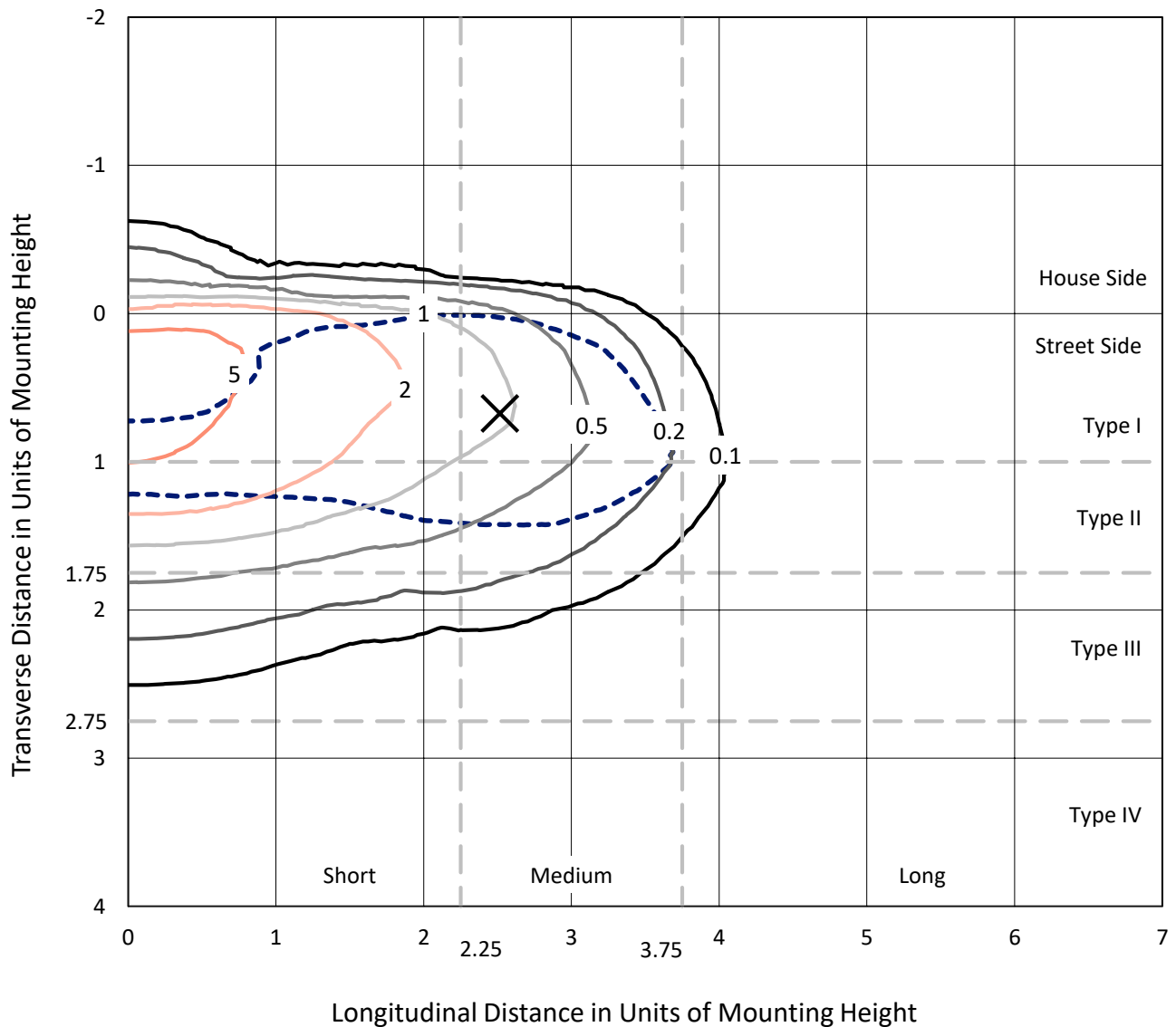


REPORT NUMBER: P265879

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

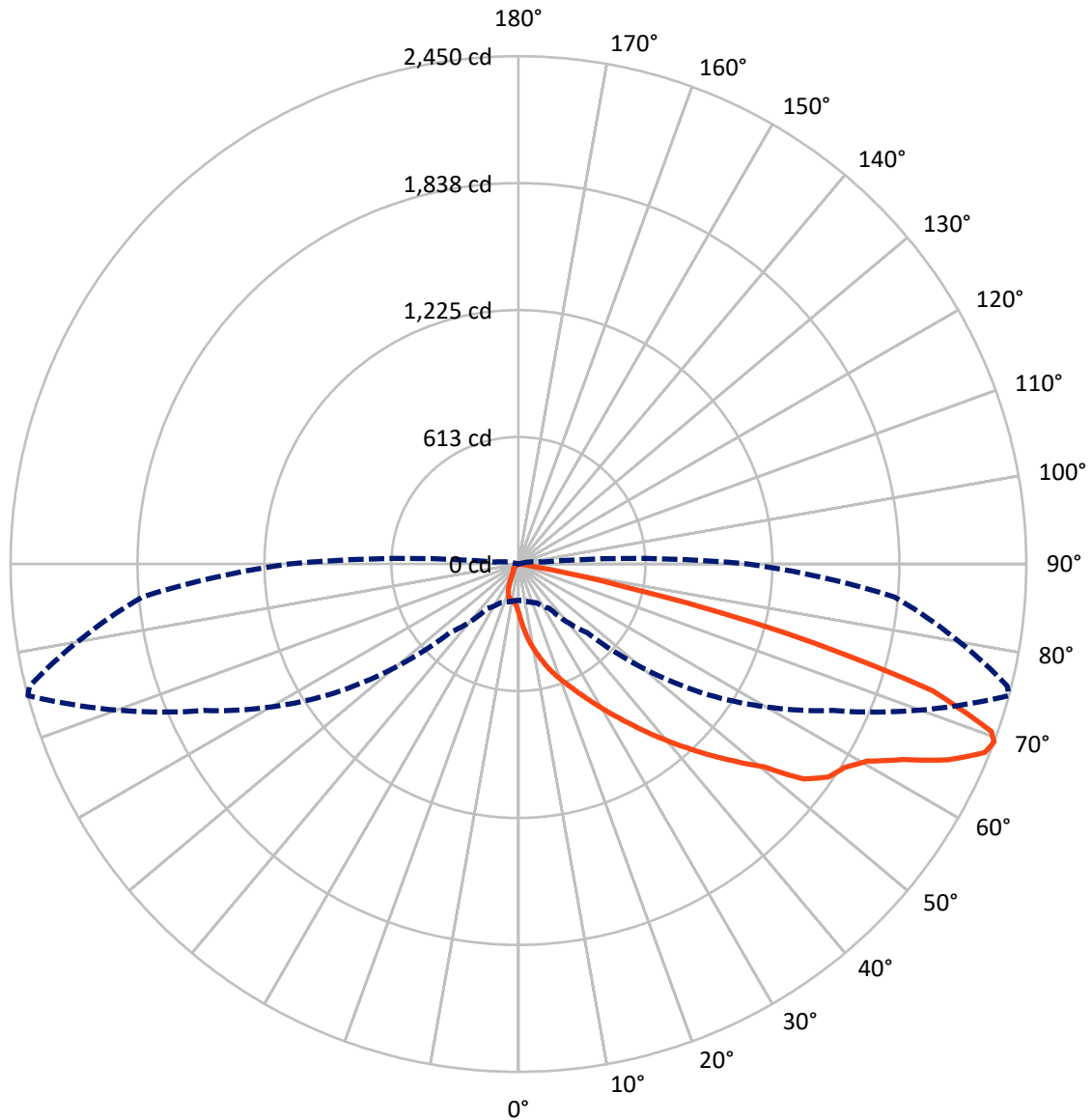


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P265879

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P265879

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7027-HSS

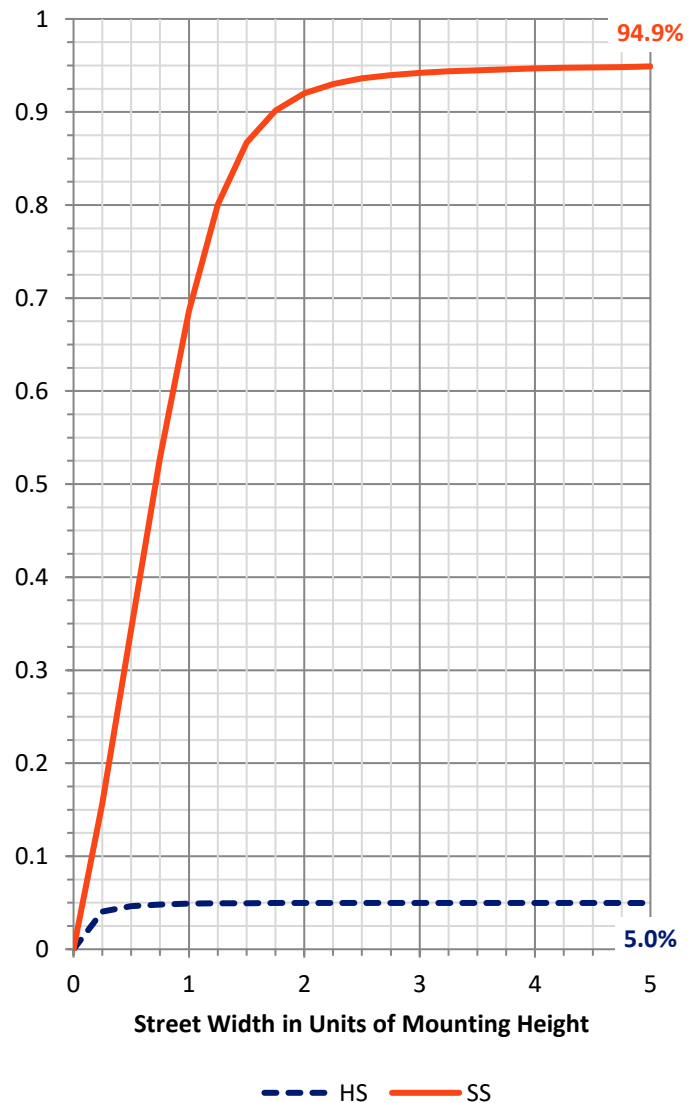
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	127.1	0.0	127.1
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2419.9	0.0	2419.9
	% Fixture	95.0	0.0	95.0
Total	Lumens	2546.9	0.0	2546.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	1.1
10°-20°	98.8	3.9
20°-30°	188.6	7.4
30°-40°	338.3	13.3
40°-50°	518.3	20.4
50°-60°	602.4	23.7
60°-70°	533.5	20.9
70°-80°	230.1	9.0
80°-90°	9.2	0.4
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°	2546.9	100.0
0°-180°	2546.9	100.0

Coefficient of Utilization



REPORT NUMBER: P265879

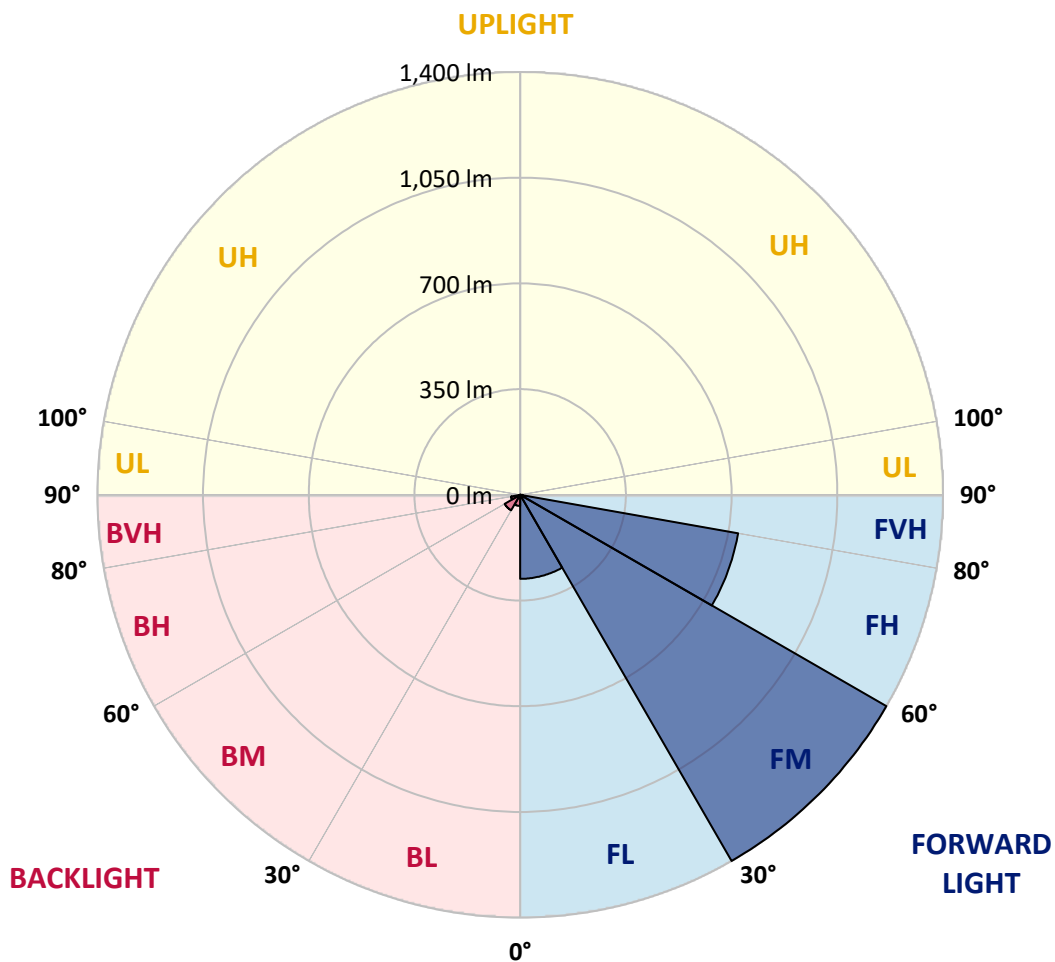
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	278.1	10.9			
FM	(30°-60°)	1399.9	55.0			
FH	(60°-80°)	732.8	28.8			G1/1800
FVH	(80°-90°)	9.1	0.4			G0/10
BL	(0°-30°)	36.9	1.4	B0/110		
BM	(30°-60°)	59.3	2.3	B0/220		
BH	(60°-80°)	30.8	1.2	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 II Medium





REPORT NUMBER: P265879

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1
2.5°	390.5	386.5	382.7	378.2	368.5	351.3	329.9	306.9	278.3	273.3	250.2
5°	473.9	472.2	468.5	462.4	451.5	432.8	408.5	374.5	326.7	318.4	269.4
7.5°	532.9	531.7	528.5	521.2	511.3	492.7	467.4	430.6	375.0	365.7	293.7
10°	585.6	585.1	582.3	575.8	565.8	545.5	518.5	480.1	421.1	410.7	321.7
12.5°	633.5	634.1	632.9	629.6	622.4	603.2	572.4	530.5	465.7	454.3	355.2
15°	661.5	663.2	667.5	674.2	676.3	661.0	629.1	582.9	511.3	501.4	393.6
17.5°	652.1	653.7	667.5	690.1	711.5	713.8	685.1	632.3	556.5	546.6	431.6
20°	629.6	631.8	646.2	677.0	718.6	747.7	736.3	686.2	599.3	587.2	467.9
22.5°	654.9	654.9	659.3	678.0	715.9	761.6	776.9	740.2	643.4	628.5	504.2
25°	741.8	740.2	730.9	723.0	735.2	775.9	807.8	795.1	695.0	678.0	542.8
27.5°	851.8	859.5	841.8	813.9	786.2	804.0	835.2	849.5	752.2	734.6	582.3
30°	974.9	978.3	957.4	920.0	871.5	854.5	867.8	896.2	814.4	795.1	623.6
32.5°	1086.1	1083.3	1065.6	1026.7	966.7	929.8	909.4	933.7	882.0	859.9	666.0
35°	1184.4	1186.7	1165.2	1120.0	1061.3	1022.2	973.9	976.0	957.9	932.6	714.8
37.5°	1273.0	1269.0	1248.7	1203.6	1150.3	1108.0	1056.9	1019.9	1040.9	1014.5	769.8
40°	1344.9	1341.1	1319.7	1275.8	1225.6	1191.1	1150.9	1078.9	1128.4	1098.1	828.6
42.5°	1402.2	1397.8	1379.5	1337.2	1288.9	1258.0	1238.9	1151.4	1221.9	1191.5	894.6
45°	1430.2	1426.4	1415.4	1383.5	1341.1	1314.2	1323.6	1235.0	1321.9	1296.6	967.3
47.5°	1397.3	1395.5	1408.3	1402.8	1378.4	1364.3	1396.7	1326.3	1426.9	1402.2	1050.7
50°	1297.2	1299.8	1336.7	1382.3	1393.9	1411.0	1456.6	1422.5	1539.7	1513.3	1147.0
52.5°	1050.3	1069.0	1180.1	1290.0	1375.2	1439.5	1526.9	1559.9	1723.3	1697.4	1297.2
55°	784.1	791.8	912.8	1100.9	1299.8	1437.4	1579.2	1640.8	1813.9	1787.5	1336.7
57.5°	621.8	624.6	684.6	876.4	1144.8	1387.8	1606.7	1669.9	1853.7	1831.6	1395.5
60°	488.3	491.6	535.0	667.0	926.5	1254.3	1567.2	1695.2	1931.1	1913.5	1498.5
62.5°	380.0	383.2	409.6	487.2	695.0	1048.6	1487.5	1736.0	2078.5	2070.2	1666.6
65°	294.1	295.3	313.4	349.7	491.1	825.9	1390.0	1773.9	2277.6	2270.3	1803.0
67.5°	217.2	218.8	231.6	254.0	331.6	593.3	1230.6	1744.7	2427.7	2406.7	1852.6
69°	175.3	177.1	188.0	206.3	261.8	467.4	1085.0	1672.7	2450.1	2430.5	1821.1
70°	150.0	151.3	162.2	177.7	223.3	397.1	969.5	1610.5	2420.6	2401.3	1749.7
72.5°	96.2	101.7	112.6	122.6	148.0	262.8	654.3	1335.6	2088.4	2055.4	1370.3
75°	53.3	54.9	74.7	86.9	98.5	170.9	364.1	833.1	1328.5	1305.3	732.9
77.5°	43.9	45.0	52.8	65.9	65.9	95.7	137.5	328.3	505.3	455.8	198.4
80°	30.8	31.9	40.2	43.5	47.3	53.9	44.6	72.0	78.2	69.3	29.7
82.5°	21.4	22.5	27.5	35.8	38.0	25.3	16.4	21.4	22.5	22.5	11.6
85°	3.9	5.5	20.3	29.7	22.5	7.6	9.3	7.6	7.1	7.6	2.8
87.5°	0.0	0.0	12.7	14.4	12.0	3.4	3.9	2.8	1.6	2.2	1.1
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: P265879

CATALOG NUMBER: ARCH-AF16-30-D-U-T2R-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1	237.1
2.5°	238.6	227.1	207.2	193.0	180.9	171.5	167.8	161.7	157.3	159.4	156.8
5°	245.2	224.8	193.0	172.7	158.3	146.2	136.4	128.6	122.6	121.5	120.5
7.5°	255.7	226.6	184.7	159.4	138.0	119.4	103.9	92.3	83.6	83.6	80.3
10°	270.0	231.0	179.8	146.2	114.4	89.1	73.8	62.7	58.3	57.8	56.7
12.5°	289.8	239.2	176.0	129.3	89.1	64.9	55.5	51.7	50.0	49.4	49.0
15°	316.7	251.3	171.5	108.3	67.6	53.3	49.4	46.3	44.6	43.9	43.5
17.5°	342.6	262.2	162.2	86.9	54.9	48.4	43.9	41.2	39.0	38.4	38.4
20°	366.8	271.6	146.2	67.6	49.4	43.5	39.0	35.8	33.5	33.0	33.0
22.5°	392.1	279.4	126.5	54.9	45.0	38.4	34.0	30.8	28.6	28.0	27.5
25°	419.0	284.9	103.9	49.0	40.8	34.0	29.1	26.4	24.8	24.3	23.6
27.5°	448.2	287.0	82.5	44.6	35.8	29.7	25.3	22.5	21.4	20.9	20.9
30°	474.6	284.9	63.8	39.5	31.4	25.8	22.0	19.9	18.7	18.1	18.1
32.5°	502.1	279.4	51.2	35.3	27.5	22.0	18.7	17.1	16.4	15.9	15.9
35°	531.2	272.1	43.9	31.4	23.6	19.3	16.4	15.5	14.8	14.4	14.4
37.5°	565.3	263.5	40.2	28.0	20.9	17.1	14.4	13.7	13.1	13.1	13.1
40°	603.8	252.5	37.4	25.3	18.7	14.8	12.7	12.0	11.6	11.6	11.6
42.5°	644.4	239.8	34.7	22.5	16.4	12.7	11.0	11.0	10.4	10.4	9.9
45°	690.1	227.1	31.9	19.9	14.4	11.0	9.3	8.9	8.9	8.3	8.3
47.5°	743.9	215.6	29.1	17.5	12.7	9.3	8.3	7.6	7.1	6.6	6.6
50°	819.9	214.4	25.8	15.5	11.6	7.6	6.6	6.1	5.5	4.9	4.9
52.5°	895.3	204.5	22.0	12.7	9.3	6.6	4.9	4.4	3.9	3.9	3.4
55°	912.1	188.0	19.3	11.0	7.1	4.9	3.9	2.8	2.8	2.2	2.2
57.5°	949.6	180.4	16.4	8.9	5.5	3.9	2.2	1.6	1.6	1.6	1.6
60°	1023.3	178.1	14.4	7.6	3.9	2.8	1.6	1.1	1.1	0.5	0.5
62.5°	1125.0	176.0	12.0	6.6	2.8	1.6	1.1	0.5	0.0	0.0	0.0
65°	1181.1	161.2	9.9	4.9	2.2	1.6	0.5	0.0	0.0	0.0	0.0
67.5°	1166.3	133.0	8.9	3.4	1.6	1.1	0.5	0.0	0.0	0.0	0.0
69°	1104.1	112.2	7.1	2.8	1.6	1.1	0.5	0.0	0.0	0.0	0.0
70°	1029.4	96.7	6.6	2.2	1.1	0.5	0.5	0.0	0.0	0.0	0.0
72.5°	730.9	50.6	4.4	1.6	1.1	0.5	0.0	0.0	0.0	0.0	0.0
75°	341.4	22.5	2.8	1.1	0.5	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	75.4	10.4	1.6	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	14.4	3.9	1.1	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.9	1.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	0.0	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)