

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: P214658

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214658
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-AF24-30-D-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3154.8 lumens
Efficiency: N/A
Efficacy: 101.8 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

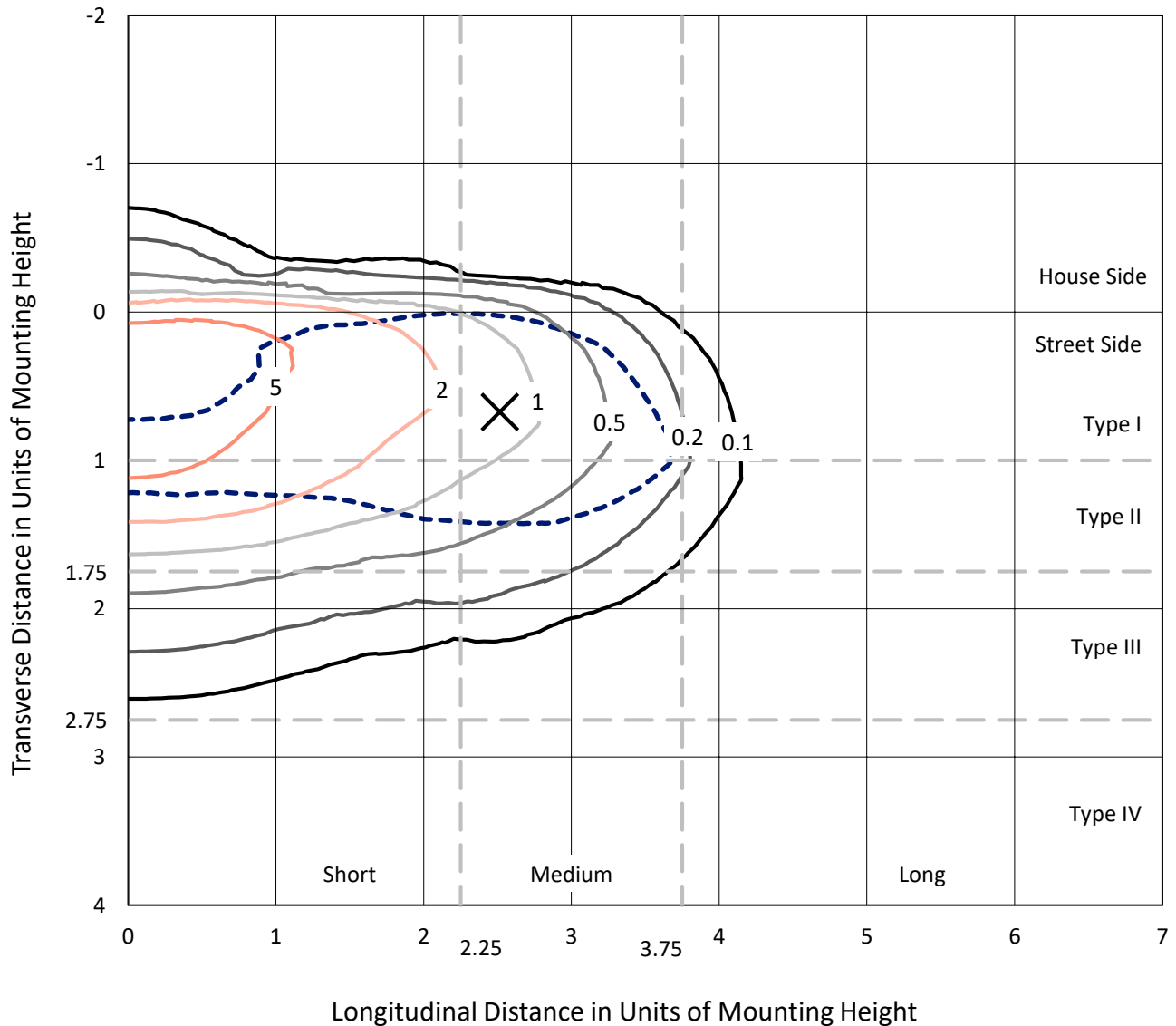
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214658
 CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

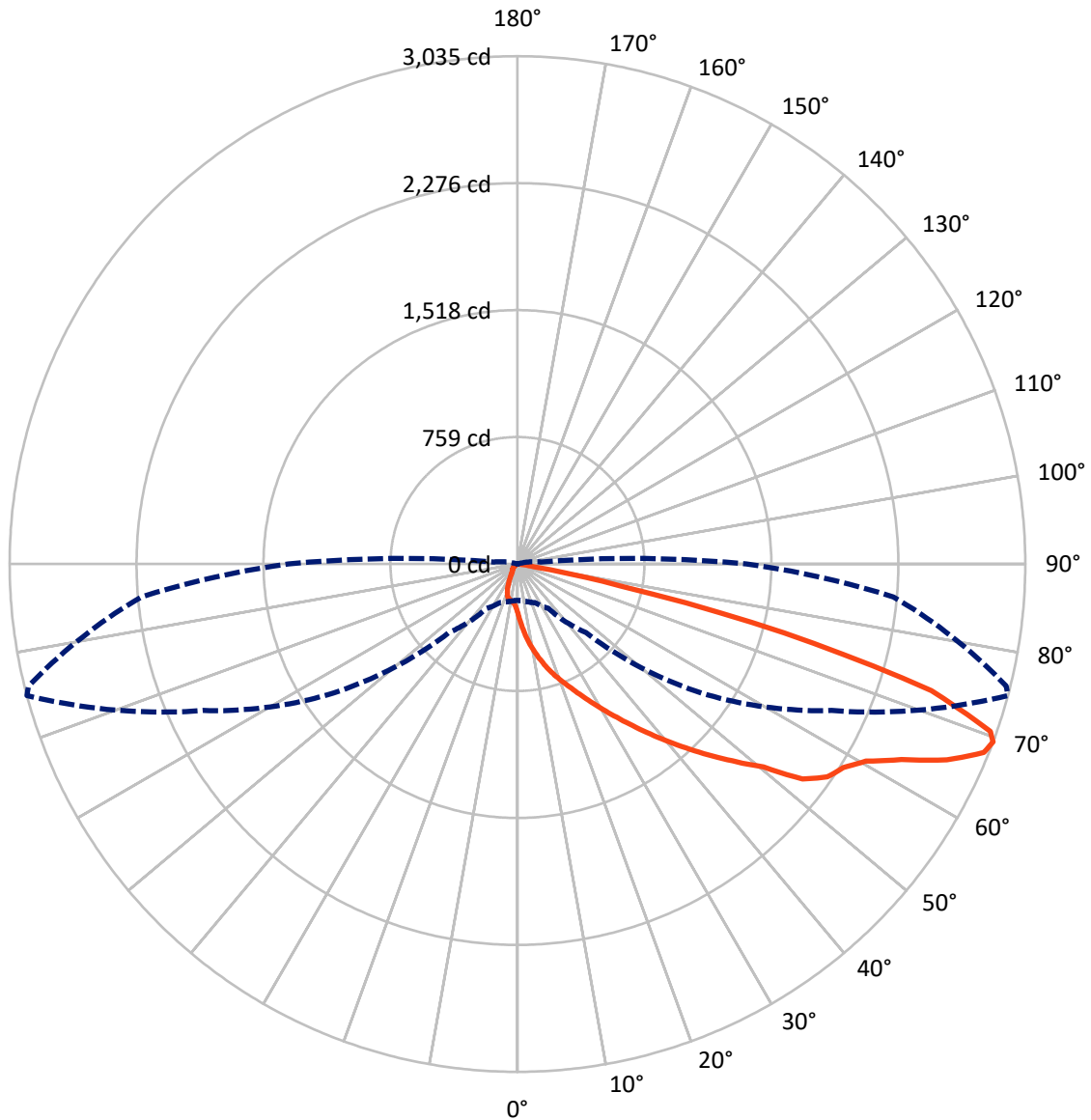
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P214658
CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214658

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

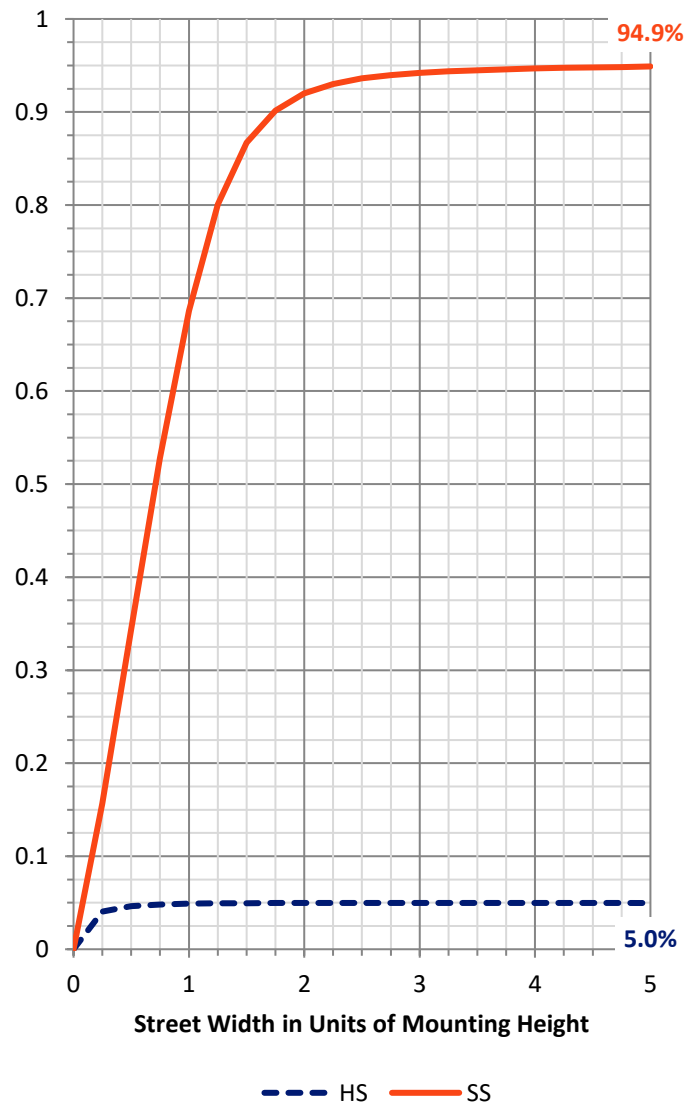
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	157.4	0.0	157.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2997.4	0.0	2997.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	3154.8	0.0	3154.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	1.1
10°-20°	122.4	3.9
20°-30°	233.6	7.4
30°-40°	419.1	13.3
40°-50°	642.0	20.4
50°-60°	746.2	23.7
60°-70°	660.8	20.9
70°-80°	285.0	9.0
80°-90°	11.4	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°	3154.8	100.0
0°-180°	3154.8	100.0

Coefficient of Utilization



REPORT NUMBER: P214658

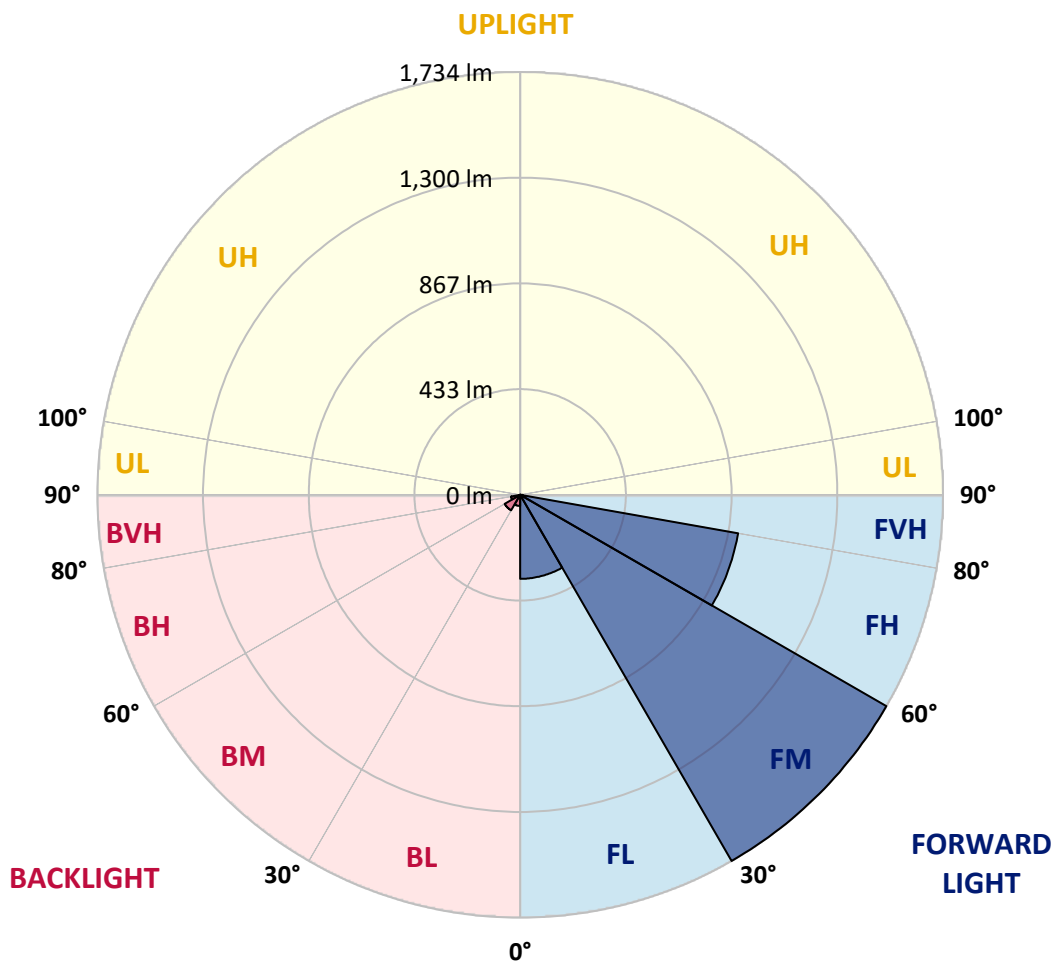
CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	344.5	10.9			
FM	(30°-60°)	1733.9	55.0			
FH	(60°-80°)	907.7	28.8			G1/1800
FVH	(80°-90°)	11.3	0.4			G1/100
BL	(0°-30°)	45.7	1.4	B0/110		
BM	(30°-60°)	73.4	2.3	B0/220		
BH	(60°-80°)	38.1	1.2	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-G1

Type II Medium





REPORT NUMBER: P214658

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6
2.5°	483.5	478.8	474.0	468.6	456.3	435.3	408.7	380.0	344.6	338.5	309.9
5°	587.1	585.0	580.3	572.8	559.1	536.0	506.1	463.8	404.6	394.3	333.7
7.5°	660.0	658.6	654.5	645.7	633.4	610.3	578.9	533.3	464.5	453.0	363.7
10°	725.4	724.7	721.3	713.1	700.8	675.7	642.3	594.6	521.7	508.8	398.4
12.5°	784.6	785.3	783.9	779.9	771.0	747.2	709.0	657.2	576.8	562.6	440.0
15°	819.4	821.4	826.9	835.0	837.7	818.7	779.2	722.0	633.4	621.1	487.6
17.5°	807.8	809.9	826.9	854.8	881.4	884.0	848.6	783.3	689.3	677.0	534.7
20°	779.9	782.6	800.3	838.4	890.2	926.3	912.0	850.0	742.4	727.4	579.6
22.5°	811.2	811.2	816.6	839.7	886.8	943.3	962.4	916.8	796.9	778.5	624.5
25°	918.8	916.8	905.2	895.6	910.6	961.1	1000.5	984.9	860.9	839.7	672.3
27.5°	1055.0	1064.6	1042.8	1008.0	974.0	995.7	1034.6	1052.3	931.7	909.9	721.3
30°	1207.6	1211.7	1185.8	1139.5	1079.5	1058.4	1074.8	1110.2	1008.7	984.9	772.3
32.5°	1345.2	1341.7	1319.9	1271.6	1197.4	1151.7	1126.6	1156.4	1092.5	1065.2	824.8
35°	1467.1	1469.8	1443.3	1387.4	1314.5	1266.1	1206.3	1208.9	1186.4	1155.1	885.5
37.5°	1576.8	1572.0	1546.8	1491.0	1424.9	1372.4	1309.1	1263.4	1289.3	1256.6	953.5
40°	1666.0	1661.2	1634.6	1580.2	1518.2	1475.2	1425.5	1336.3	1397.6	1360.1	1026.4
42.5°	1736.8	1731.3	1708.8	1656.5	1596.5	1558.4	1534.5	1426.2	1513.4	1475.9	1108.2
45°	1771.5	1766.7	1753.1	1713.6	1661.2	1627.8	1639.4	1529.7	1637.3	1606.0	1198.1
47.5°	1730.6	1728.6	1744.2	1737.5	1707.5	1689.8	1730.0	1642.8	1767.5	1736.8	1301.6
50°	1606.7	1610.1	1655.7	1712.3	1726.5	1747.7	1804.2	1762.0	1907.1	1874.4	1420.8
52.5°	1300.9	1324.0	1461.6	1597.8	1703.4	1783.1	1891.4	1932.3	2134.6	2102.6	1606.7
55°	971.2	980.8	1130.6	1363.6	1610.1	1780.3	1956.1	2032.4	2246.9	2214.3	1655.7
57.5°	770.3	773.8	847.9	1085.7	1418.0	1719.1	1990.2	2068.5	2296.0	2268.7	1728.6
60°	604.8	608.9	662.7	826.1	1147.6	1553.6	1941.2	2099.8	2392.0	2370.2	1855.9
62.5°	470.7	474.8	507.4	603.4	860.9	1298.8	1842.3	2150.2	2574.6	2564.3	2064.4
65°	364.4	365.7	388.2	433.2	608.2	1023.0	1721.8	2197.2	2821.1	2812.2	2233.3
67.5°	269.0	271.1	286.7	314.7	410.7	734.9	1524.3	2161.1	3007.1	2981.2	2294.6
69°	217.3	219.3	232.9	255.4	324.2	578.9	1343.7	2071.9	3035.0	3010.4	2255.8
70°	186.0	187.3	200.9	220.0	276.5	491.7	1200.7	1995.0	2998.2	2974.3	2167.2
72.5°	119.2	126.0	139.6	151.9	183.2	325.6	810.5	1654.4	2586.8	2545.9	1697.3
75°	66.1	68.1	92.7	107.6	121.9	211.9	450.9	1031.9	1645.5	1616.9	907.9
77.5°	54.5	55.9	65.4	81.7	81.7	118.6	170.3	406.6	625.9	564.7	245.9
80°	38.2	39.5	49.7	53.8	58.6	66.7	55.1	89.2	96.7	85.8	36.8
82.5°	26.6	27.9	34.1	44.3	47.0	31.3	20.5	26.6	27.9	27.9	14.3
85°	4.8	6.9	25.2	36.8	27.9	9.5	11.6	9.5	8.9	9.5	3.4
87.5°	0.0	0.0	15.7	17.7	14.9	4.1	4.8	3.4	2.0	2.8	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: P214658

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6
2.5°	295.6	281.3	256.8	239.1	224.1	212.5	207.8	200.2	194.8	197.5	194.2
5°	303.8	278.5	239.1	213.9	196.2	181.2	168.9	159.4	151.9	150.5	149.1
7.5°	316.7	280.6	228.8	197.5	170.9	147.8	128.7	114.5	103.5	103.5	99.4
10°	334.4	286.0	222.7	181.2	141.7	110.4	91.2	77.6	72.2	71.5	70.2
12.5°	359.0	296.2	218.0	160.1	110.4	80.4	68.7	64.0	62.0	61.3	60.7
15°	392.3	311.3	212.5	134.2	83.8	66.1	61.3	57.2	55.1	54.5	53.8
17.5°	424.3	324.9	200.9	107.6	68.1	59.9	54.5	51.0	48.4	47.7	47.7
20°	454.3	336.4	181.2	83.8	61.3	53.8	48.4	44.3	41.5	40.8	40.8
22.5°	485.6	346.0	156.6	68.1	55.9	47.7	42.2	38.2	35.4	34.8	34.1
25°	518.9	352.8	128.7	60.7	50.4	42.2	36.1	32.7	30.7	30.0	29.3
27.5°	555.1	355.6	102.2	55.1	44.3	36.8	31.3	27.9	26.6	25.9	25.9
30°	587.8	352.8	79.0	49.0	38.9	32.0	27.2	24.6	23.1	22.5	22.5
32.5°	621.9	346.0	63.3	43.6	34.1	27.2	23.1	21.1	20.5	19.7	19.7
35°	658.0	337.2	54.5	38.9	29.3	23.8	20.5	19.0	18.4	17.7	17.7
37.5°	700.2	326.2	49.7	34.8	25.9	21.1	17.7	17.0	16.4	16.4	16.4
40°	747.9	312.6	46.3	31.3	23.1	18.4	15.7	14.9	14.3	14.3	14.3
42.5°	798.2	297.0	42.9	27.9	20.5	15.7	13.6	13.6	13.0	13.0	12.3
45°	854.8	281.3	39.5	24.6	17.7	13.6	11.6	10.9	10.9	10.2	10.2
47.5°	921.5	267.0	36.1	21.8	15.7	11.6	10.2	9.5	8.9	8.2	8.2
50°	1015.5	265.7	32.0	19.0	14.3	9.5	8.2	7.5	6.9	6.1	6.1
52.5°	1108.8	253.4	27.2	15.7	11.6	8.2	6.1	5.4	4.8	4.8	4.1
55°	1130.0	232.9	23.8	13.6	8.9	6.1	4.8	3.4	3.4	2.8	2.8
57.5°	1176.3	223.4	20.5	10.9	6.9	4.8	2.8	2.0	2.0	2.0	2.0
60°	1267.5	220.7	17.7	9.5	4.8	3.4	2.0	1.3	1.3	0.7	0.7
62.5°	1393.6	218.0	14.9	8.2	3.4	2.0	1.3	0.7	0.0	0.0	0.0
65°	1463.0	199.6	12.3	6.1	2.8	2.0	0.7	0.0	0.0	0.0	0.0
67.5°	1444.6	164.8	10.9	4.1	2.0	1.3	0.7	0.0	0.0	0.0	0.0
69°	1367.7	138.9	8.9	3.4	2.0	1.3	0.7	0.0	0.0	0.0	0.0
70°	1275.0	119.9	8.2	2.8	1.3	0.7	0.7	0.0	0.0	0.0	0.0
72.5°	905.2	62.7	5.4	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0
75°	423.0	27.9	3.4	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	93.3	13.0	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.7	4.8	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.1	2.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	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)