

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: P257687

Luminaire Tested: **ARCH-AF16-20-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257687
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-20-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2074.6 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G0

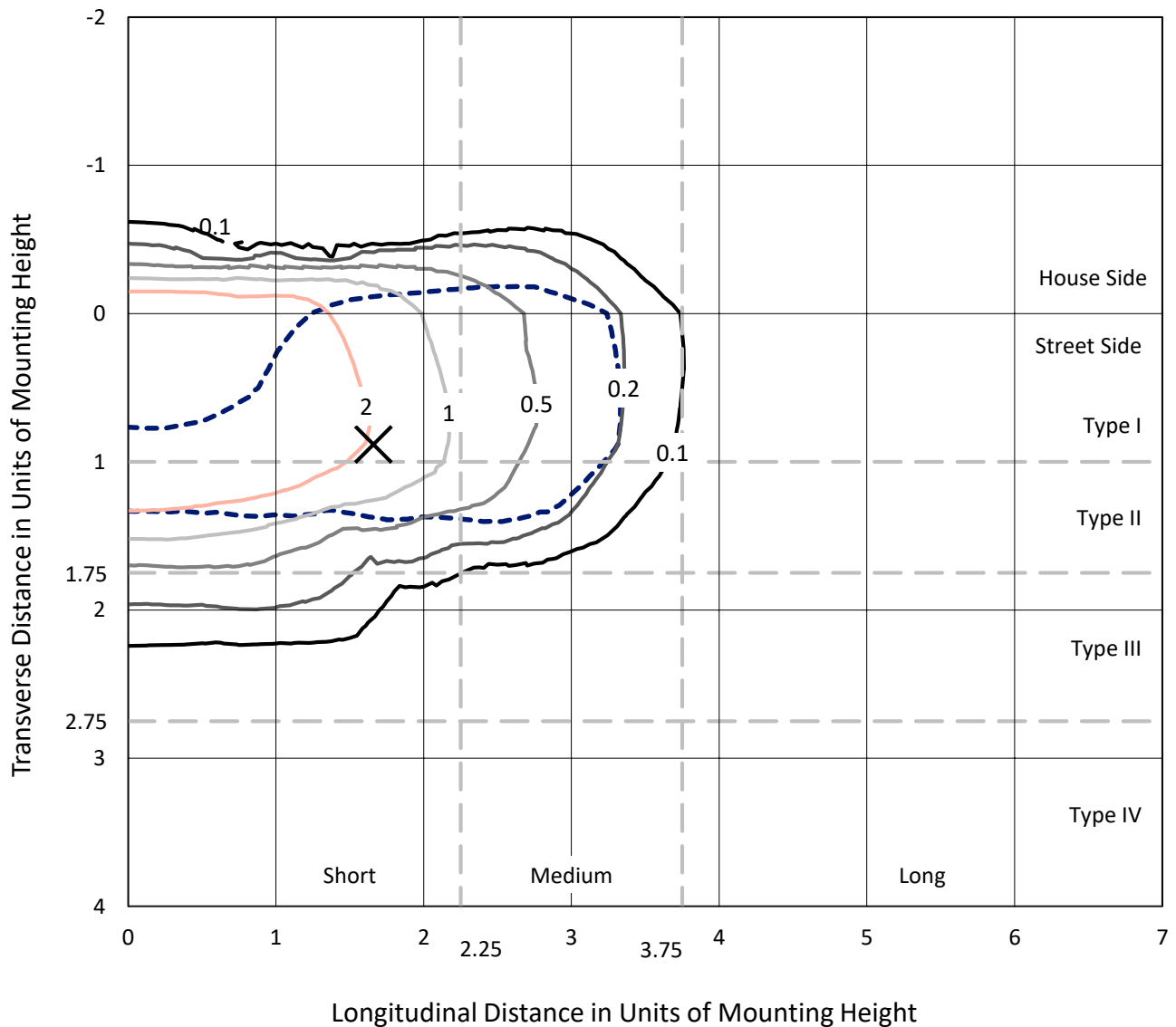
Input Watts (W): 24
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

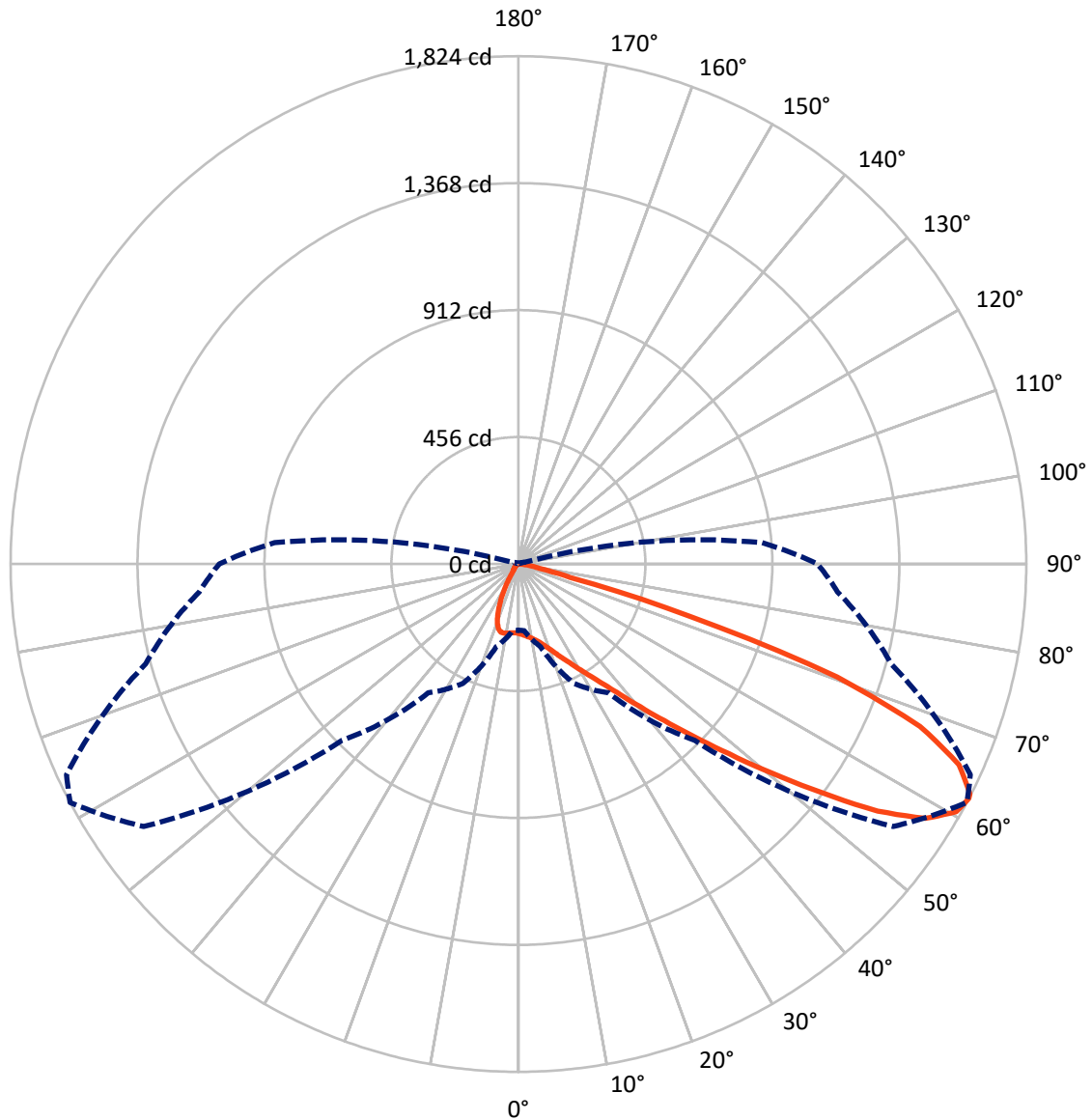
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical



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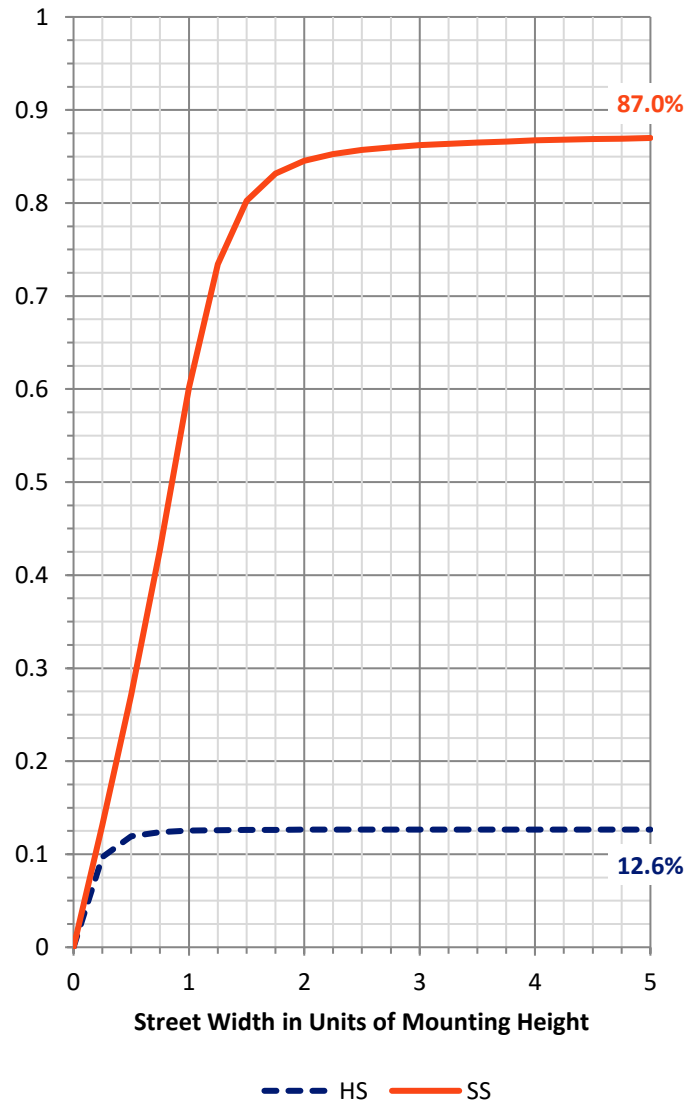
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	265.3	0.0	265.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	1809.3	0.0	1809.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	2074.6	0.0	2074.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	1.2
10°-20°	67.2	3.2
20°-30°	112.8	5.4
30°-40°	216.2	10.4
40°-50°	441.6	21.3
50°-60°	584.4	28.2
60°-70°	454.0	21.9
70°-80°	163.9	7.9
80°-90°	10.4	0.5
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°	2074.6	100.0
0°-180°	2074.6	100.0

Coefficient of Utilization



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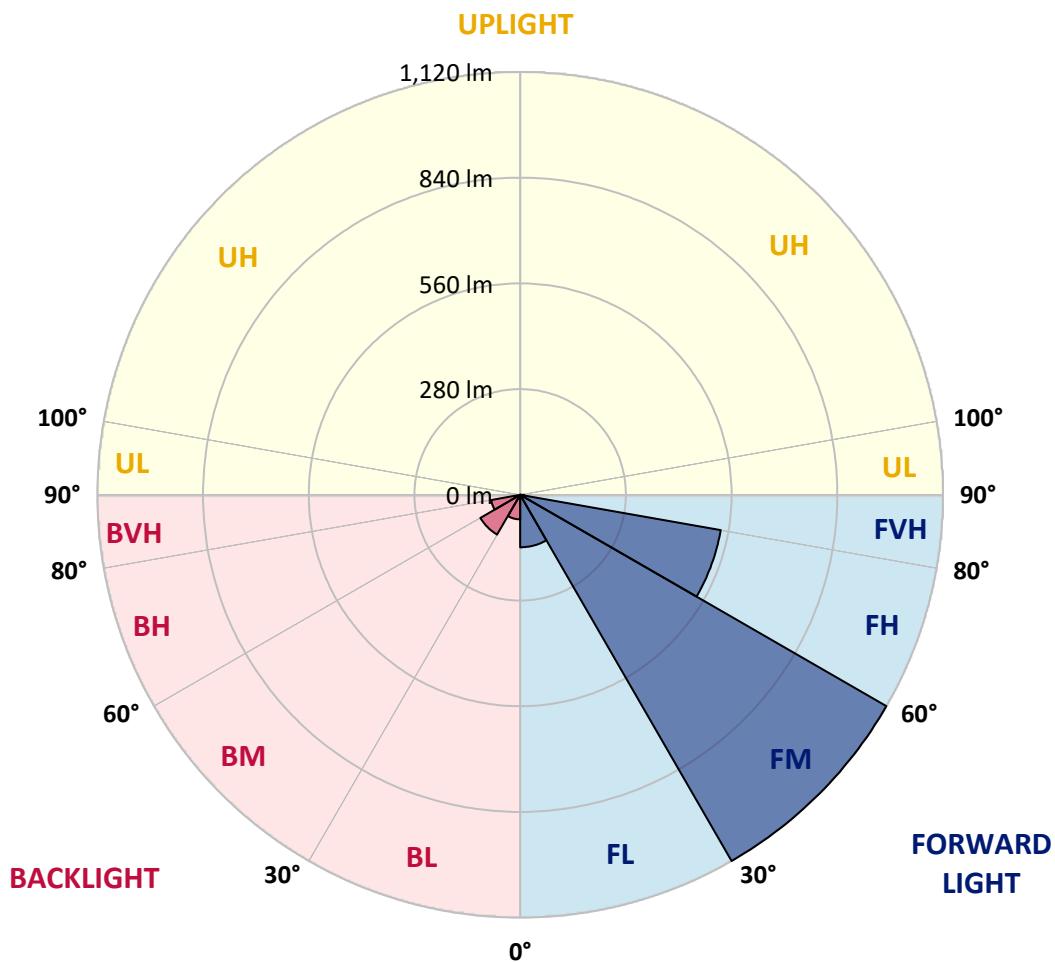
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	139.1	6.7			
FM (30°-60°)	1120.5	54.0			
FH (60°-80°)	539.7	26.0			G0/660
FVH (80°-90°)	10.0	0.5			G0/10
BL (0°-30°)	64.9	3.1	B0/110		
BM (30°-60°)	121.8	5.9	B0/220		
BH (60°-80°)	78.1	3.8	B0/110		G0/110
BVH (80°-90°)	0.5	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-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9
2.5°	256.6	256.0	255.5	255.0	255.0	254.5	254.0	253.0	252.0	250.9	250.4
5°	261.2	260.6	260.1	260.6	260.1	260.1	259.6	258.6	257.6	256.0	254.5
7.5°	264.7	264.2	263.7	264.2	264.7	265.3	265.8	264.7	264.2	262.2	260.6
10°	269.2	268.7	268.2	269.2	269.2	271.8	272.3	271.8	271.3	269.8	267.3
12.5°	275.9	276.4	276.4	277.4	278.4	281.5	282.5	281.0	281.0	279.0	275.9
15°	288.2	288.2	288.2	289.2	289.7	293.8	294.8	293.3	294.3	290.7	287.7
17.5°	299.9	300.4	301.5	303.4	303.4	307.0	309.0	309.0	311.1	306.5	302.5
20°	311.6	312.1	313.6	318.2	318.2	322.8	326.4	328.0	330.0	325.4	318.2
22.5°	324.4	324.4	326.9	334.1	332.6	341.7	348.3	350.9	352.9	346.8	335.6
25°	343.7	341.7	343.7	350.4	349.3	362.1	374.3	376.9	379.4	372.4	355.5
27.5°	380.4	377.4	370.3	370.8	370.8	385.6	402.9	406.5	408.1	401.9	380.9
30°	453.9	453.9	427.4	409.6	397.8	411.0	435.6	441.7	443.8	434.5	407.0
32.5°	582.0	582.0	533.0	487.5	443.2	443.2	471.3	482.4	484.5	473.8	441.7
35°	745.1	744.1	670.6	608.5	521.7	489.1	513.1	531.9	538.1	523.8	486.5
37.5°	918.5	911.9	832.9	761.5	642.6	562.5	569.7	594.6	600.3	588.5	544.7
40°	1059.3	1051.7	987.9	928.2	798.7	679.9	651.3	674.2	680.9	664.5	614.1
42.5°	1186.8	1167.9	1124.0	1081.3	978.2	882.8	760.0	769.1	776.2	758.9	692.1
45°	1279.1	1250.0	1227.6	1214.3	1159.7	1105.7	900.7	882.3	884.9	863.5	777.2
47.5°	1281.7	1261.3	1263.3	1298.0	1320.4	1318.4	1083.8	1018.4	1008.8	973.1	868.1
50°	1159.2	1171.0	1208.2	1307.1	1428.6	1502.0	1301.5	1179.7	1150.6	1086.4	958.3
52.5°	955.2	973.6	1043.5	1210.3	1444.3	1622.8	1527.5	1363.8	1311.7	1198.5	1027.7
55°	748.2	749.2	822.7	992.5	1338.7	1644.8	1708.0	1566.2	1486.7	1283.7	1073.6
57.5°	514.6	542.7	636.0	750.2	1100.6	1535.7	1775.8	1723.4	1620.9	1336.3	1105.7
60°	337.2	338.7	447.2	579.4	749.2	1249.5	1734.5	1806.4	1729.4	1367.4	1127.6
62°	237.6	240.2	307.5	473.3	564.6	895.6	1643.3	1823.8	1790.7	1385.7	1150.6
62.5°	220.3	222.4	279.0	446.7	530.4	803.2	1610.6	1819.7	1799.9	1391.8	1158.7
65°	161.6	161.6	182.6	307.0	388.6	434.0	1364.8	1738.6	1787.6	1440.8	1189.4
67.5°	124.9	125.9	133.1	189.2	293.3	263.2	871.1	1556.0	1660.0	1513.3	1206.7
70°	107.6	107.1	112.2	125.4	211.6	174.9	383.5	1214.3	1390.3	1494.8	1190.9
72.5°	79.6	80.1	91.8	110.2	147.4	113.8	173.4	644.7	901.7	1169.9	1020.5
75°	51.0	51.6	64.8	86.7	106.1	74.5	99.9	192.3	369.3	648.8	624.2
77.5°	34.2	35.2	42.4	60.7	92.8	46.4	62.7	80.6	111.2	243.3	223.9
80°	22.9	22.9	27.0	40.8	58.6	38.8	33.7	53.5	57.6	75.5	37.7
82.5°	15.3	15.3	17.8	27.0	38.3	34.7	20.4	29.1	33.7	37.7	13.3
85°	9.2	9.2	12.3	16.9	25.0	19.3	13.3	16.4	17.4	23.9	7.2
87.5°	5.6	5.1	8.2	11.8	13.3	11.8	8.7	8.7	9.2	13.3	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9	249.9
2.5°	249.4	248.9	248.4	247.3	245.8	244.8	243.8	242.7	241.7	241.7	243.3
5°	254.0	252.5	250.4	248.4	245.3	243.3	241.7	239.7	238.7	238.7	239.2
7.5°	259.6	258.1	254.5	250.9	246.3	242.7	239.2	234.6	231.1	229.6	231.1
10°	265.8	263.7	258.6	253.0	247.9	238.7	227.0	212.7	200.4	194.9	197.3
12.5°	273.3	270.8	264.7	257.1	245.3	222.9	193.8	160.6	139.7	130.0	132.1
15°	284.6	281.0	272.3	260.6	234.6	186.2	138.7	100.5	81.1	72.9	74.0
17.5°	297.9	293.3	281.5	259.6	207.0	134.1	82.7	58.6	50.5	48.5	48.5
20°	312.1	306.0	290.7	252.0	165.2	84.2	51.6	44.9	41.8	40.3	40.3
22.5°	326.9	318.8	298.4	234.1	117.8	52.6	42.4	37.7	34.2	32.6	32.6
25°	344.7	334.1	306.0	203.0	75.0	42.4	36.2	31.6	28.0	26.0	26.5
27.5°	365.7	351.9	312.6	164.2	48.5	36.7	30.1	25.5	22.4	21.4	21.4
30°	387.6	371.3	314.1	123.0	39.3	31.6	25.0	20.9	18.8	17.8	17.8
32.5°	417.7	396.3	309.5	81.6	33.1	26.5	20.9	17.4	15.9	15.3	15.3
35°	457.5	428.9	298.9	50.5	28.0	21.9	17.4	15.3	13.8	13.3	13.3
37.5°	508.0	474.3	280.0	34.7	23.9	17.8	14.8	13.3	12.3	11.8	11.8
40°	575.3	529.4	255.5	30.1	20.4	15.3	12.8	11.8	10.7	10.7	10.7
42.5°	646.7	596.2	223.9	26.5	17.4	13.3	11.3	10.2	9.7	9.2	9.2
45°	724.8	664.5	184.6	23.4	14.8	11.8	10.2	8.7	8.2	8.2	8.2
47.5°	802.2	734.9	141.8	20.4	12.8	10.2	8.7	7.7	7.2	6.6	6.6
50°	881.8	798.7	104.0	17.8	11.3	9.2	7.7	6.6	5.6	5.1	5.1
52.5°	939.5	837.0	76.0	15.3	9.7	7.7	6.1	5.1	4.1	3.6	3.6
55°	981.7	860.4	55.5	12.8	8.7	6.6	5.1	4.1	3.1	3.1	2.6
57.5°	1015.0	871.7	41.8	11.3	7.7	5.6	4.1	3.1	2.6	2.0	2.0
60°	1040.4	872.2	31.1	9.2	6.6	4.6	3.1	2.0	1.5	1.5	1.5
62°	1074.1	878.7	25.5	7.7	6.1	4.1	2.6	1.5	1.0	0.5	0.5
62.5°	1083.8	881.3	24.4	7.7	5.6	3.6	2.0	1.5	1.0	0.5	0.5
65°	1128.6	885.9	18.8	6.1	4.6	3.1	1.5	1.0	0.0	0.0	0.0
67.5°	1169.4	878.7	13.8	4.6	3.6	2.0	1.5	0.5	0.0	0.0	0.0
70°	1165.3	829.8	9.7	3.1	2.6	1.5	1.0	0.0	0.0	0.0	0.0
72.5°	960.3	621.2	6.6	2.6	1.5	1.0	0.5	0.0	0.0	0.0	0.0
75°	579.9	271.8	4.6	1.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0
77.5°	190.3	98.4	3.1	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
80°	31.1	16.4	1.5	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0
82.5°	9.7	4.1	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
85°	3.6	1.5	1.0	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	1.0	1.0	1.0	0.5	0.5	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)