

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: P214643

Luminaire Tested: **ARCH-AF24-20-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214643  
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-AF24-20-D-U-T2R-7030-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 260mA 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: 1950 lumens  
Efficiency: N/A  
Efficacy: 92.9 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 - G0

Input Watts (W): 21  
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

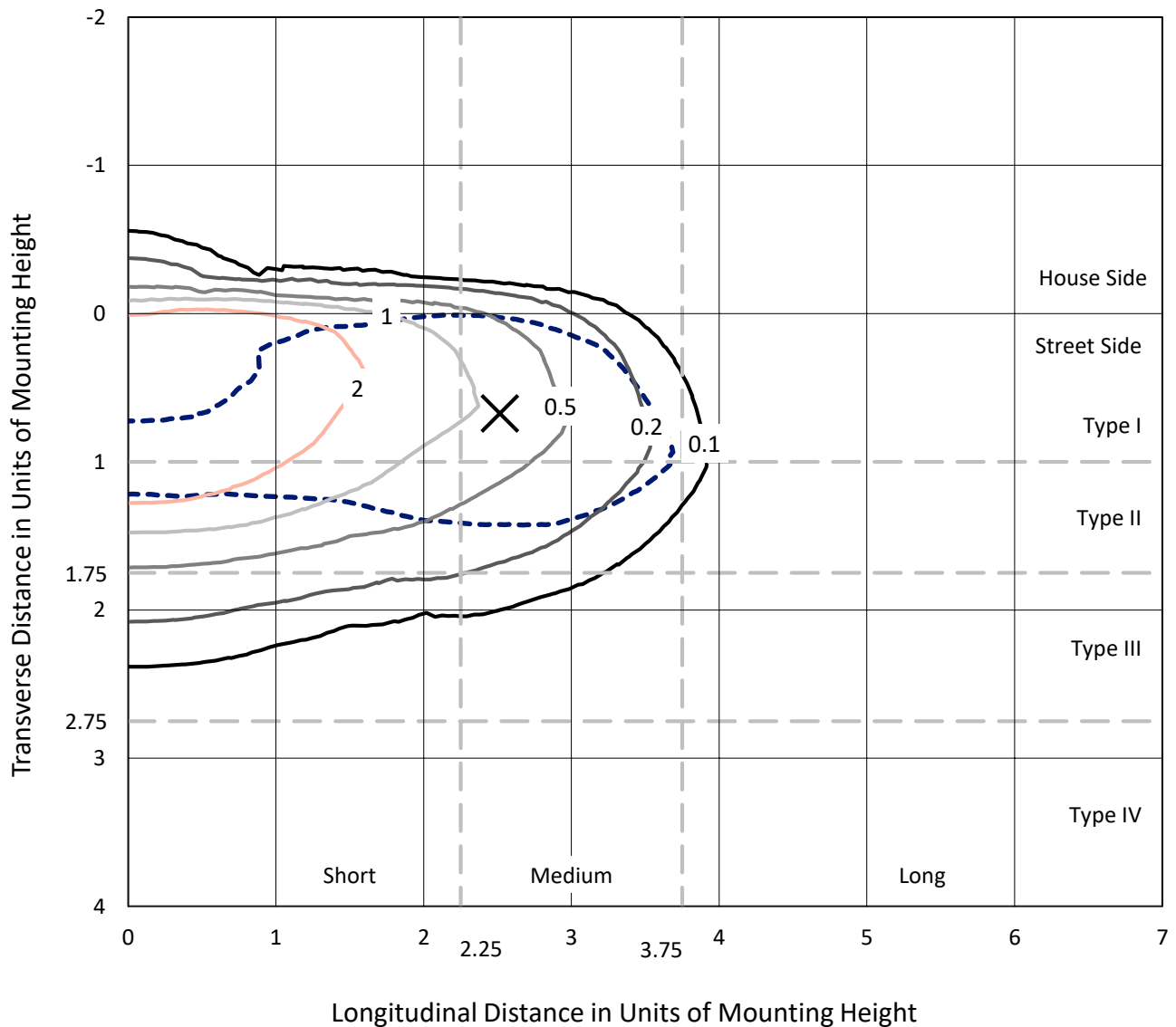


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

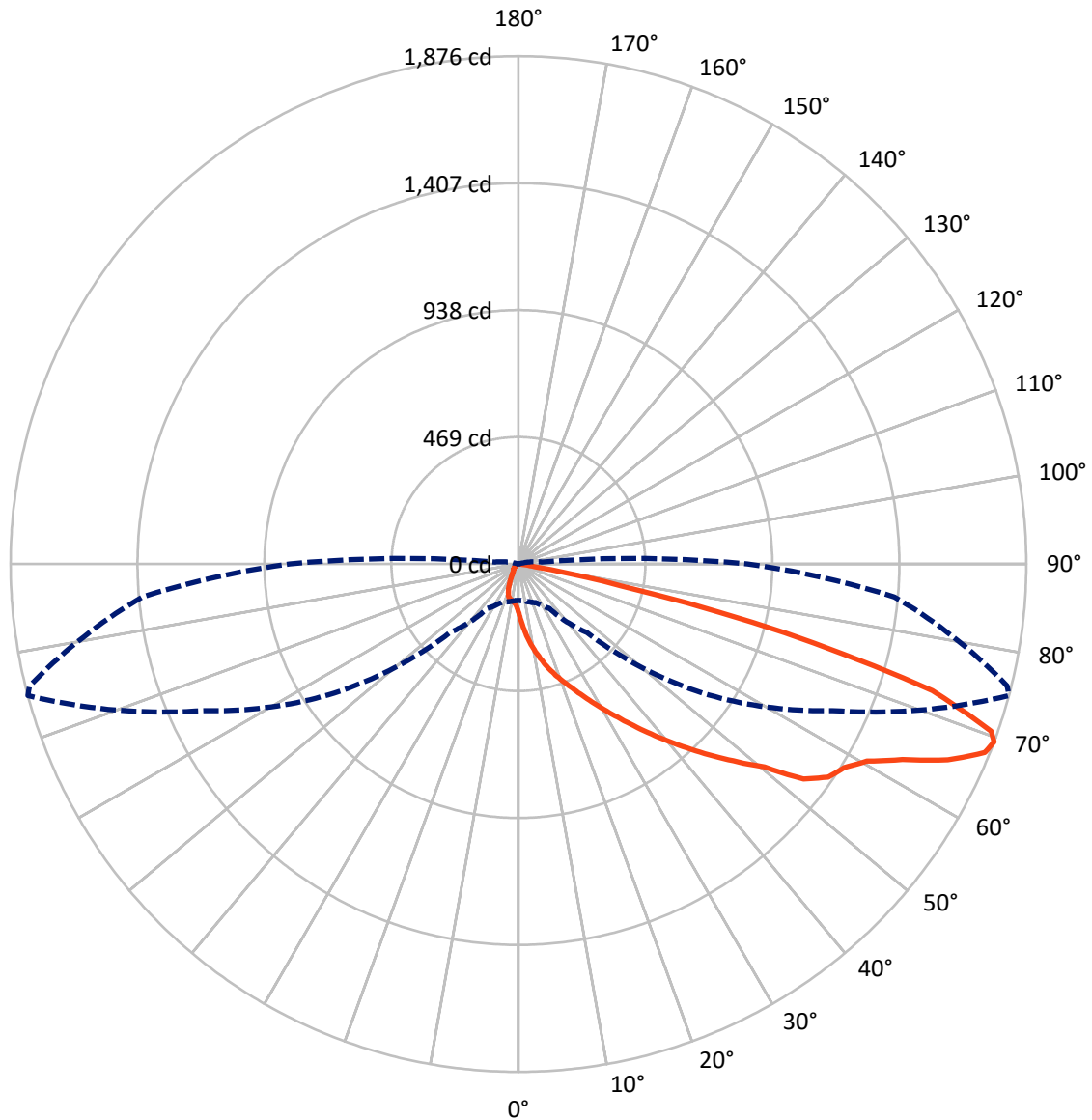


Based on 10 foot mounting height. Maximum calculated value = 5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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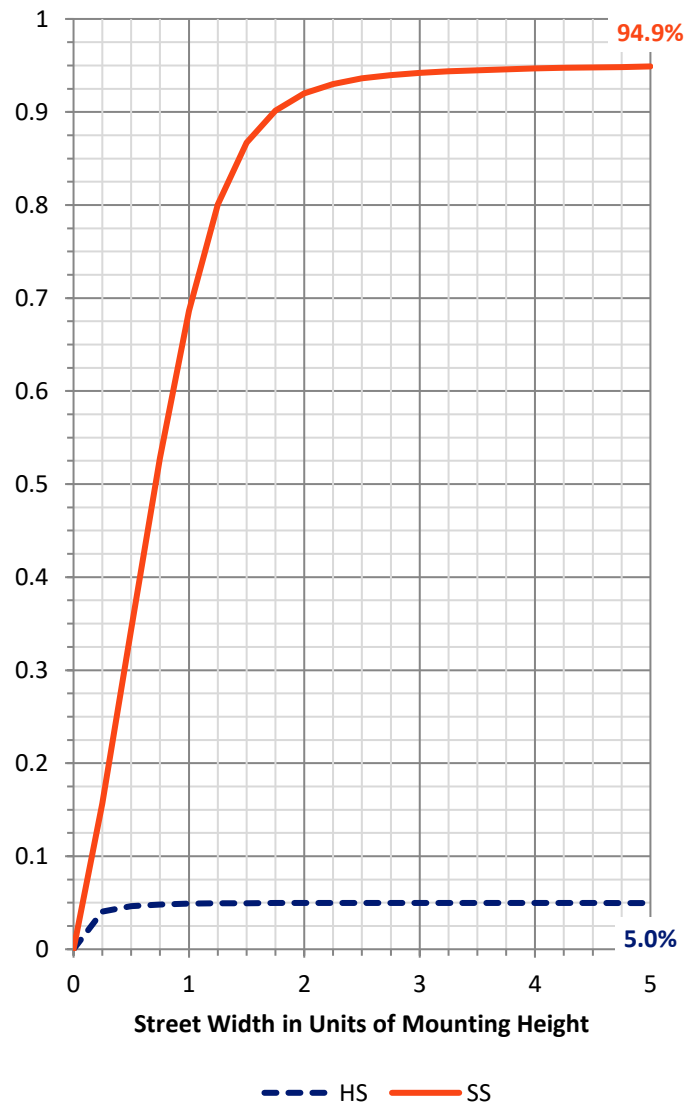
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	97.3	0.0	97.3
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	1852.7	0.0	1852.7
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	1950.0	0.0	1950.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.2	1.1
10°-20°	75.6	3.9
20°-30°	144.4	7.4
30°-40°	259.0	13.3
40°-50°	396.9	20.4
50°-60°	461.2	23.7
60°-70°	408.4	20.9
70°-80°	176.2	9.0
80°-90°	7.1	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°	1950.0	100.0
0°-180°	1950.0	100.0

**Coefficient of Utilization**



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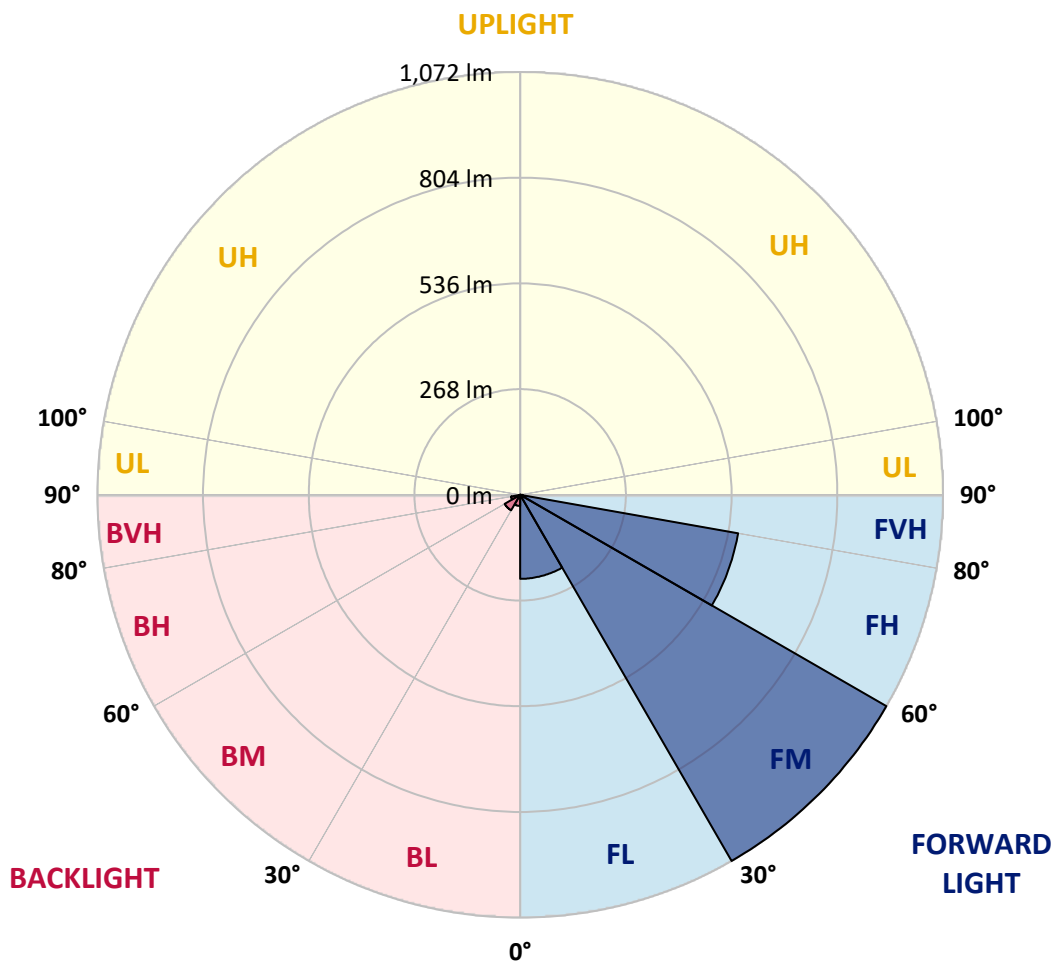
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	212.9	10.9			
FM (30°-60°)	1071.8	55.0			
FH (60°-80°)	561.0	28.8			G0/660
FVH (80°-90°)	7.0	0.4			G0/10
BL (0°-30°)	28.3	1.4	B0/110		
BM (30°-60°)	45.4	2.3	B0/220		
BH (60°-80°)	23.6	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-G0**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4
2.5°	298.9	296.0	293.0	289.6	282.1	269.0	252.6	234.9	213.0	209.2	191.6
5°	362.9	361.6	358.7	354.1	345.6	331.3	312.8	286.7	250.1	243.8	206.3
7.5°	407.9	407.1	404.6	399.1	391.5	377.2	357.8	329.6	287.1	280.0	224.8
10°	448.4	447.9	445.8	440.8	433.2	417.6	397.0	367.5	322.5	314.5	246.3
12.5°	485.0	485.4	484.6	482.0	476.6	461.8	438.3	406.3	356.6	347.7	272.0
15°	506.5	507.7	511.1	516.1	517.8	506.0	481.6	446.2	391.5	383.9	301.4
17.5°	499.3	500.6	511.1	528.3	544.8	546.4	524.6	484.1	426.0	418.5	330.5
20°	482.0	483.7	494.7	518.2	550.2	572.5	563.7	525.4	458.9	449.6	358.3
22.5°	501.4	501.4	504.8	519.1	548.1	583.1	594.9	566.7	492.6	481.2	386.0
25°	567.9	566.7	559.5	553.6	562.9	594.0	618.4	608.8	532.1	519.1	415.5
27.5°	652.1	658.0	644.5	623.1	602.0	615.5	639.5	650.4	575.9	562.4	445.8
30°	746.4	748.9	732.9	704.3	667.3	654.2	664.3	686.2	623.5	608.8	477.4
32.5°	831.5	829.4	815.9	786.0	740.1	711.9	696.3	714.8	675.3	658.4	509.8
35°	906.8	908.5	892.1	857.6	812.5	782.6	745.6	747.3	733.4	714.0	547.3
37.5°	974.6	971.6	956.1	921.5	880.7	848.3	809.1	780.9	796.9	776.7	589.4
40°	1029.7	1026.8	1010.4	976.7	938.4	911.9	881.1	826.0	863.9	840.7	634.4
42.5°	1073.5	1070.2	1056.3	1023.8	986.8	963.2	948.5	881.6	935.4	912.3	685.0
45°	1095.0	1092.0	1083.6	1059.2	1026.8	1006.2	1013.3	945.5	1012.1	992.7	740.5
47.5°	1069.7	1068.5	1078.2	1073.9	1055.4	1044.5	1069.3	1015.4	1092.5	1073.5	804.5
50°	993.1	995.2	1023.4	1058.4	1067.2	1080.3	1115.2	1089.1	1178.8	1158.6	878.2
52.5°	804.1	818.4	903.4	987.6	1052.9	1102.2	1169.1	1194.3	1319.4	1299.6	993.1
55°	600.3	606.2	698.8	842.8	995.2	1100.5	1209.1	1256.2	1388.8	1368.6	1023.4
57.5°	476.1	478.2	524.1	671.1	876.5	1062.6	1230.1	1278.5	1419.2	1402.3	1068.5
60°	373.8	376.4	409.6	510.7	709.4	960.3	1199.8	1297.9	1478.5	1465.0	1147.2
62.5°	290.9	293.4	313.6	373.0	532.1	802.8	1138.8	1329.1	1591.3	1585.0	1276.0
65°	225.2	226.1	240.0	267.7	375.9	632.3	1064.3	1358.1	1743.7	1738.3	1380.4
67.5°	166.3	167.6	177.2	194.5	253.9	454.2	942.2	1335.8	1858.7	1842.7	1418.3
69°	134.3	135.6	144.0	157.9	200.4	357.8	830.6	1280.7	1875.9	1860.8	1394.3
70°	114.9	115.8	124.2	136.0	170.9	304.0	742.2	1233.1	1853.2	1838.5	1339.6
72.5°	73.7	77.9	86.3	93.9	113.2	201.2	501.0	1022.6	1598.9	1573.7	1049.1
75°	40.8	42.1	57.3	66.5	75.4	130.9	278.7	637.8	1017.1	999.4	561.2
77.5°	33.7	34.5	40.4	50.5	50.5	73.3	105.2	251.3	386.9	349.0	152.0
80°	23.6	24.4	30.7	33.3	36.2	41.3	34.1	55.1	59.8	53.0	22.7
82.5°	16.4	17.3	21.0	27.4	29.0	19.4	12.6	16.4	17.3	17.3	8.8
85°	2.9	4.2	15.6	22.7	17.3	5.9	7.2	5.9	5.5	5.9	2.1
87.5°	0.0	0.0	9.7	10.9	9.3	2.5	2.9	2.1	1.3	1.7	0.8
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°	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4
2.5°	182.7	173.9	158.7	147.8	138.5	131.3	128.4	123.8	120.4	122.1	120.0
5°	187.8	172.2	147.8	132.2	121.2	112.0	104.4	98.5	93.9	93.0	92.2
7.5°	195.8	173.4	141.5	122.1	105.7	91.4	79.6	70.7	64.0	64.0	61.5
10°	206.7	176.8	137.7	112.0	87.6	68.2	56.4	48.0	44.6	44.2	43.4
12.5°	221.9	183.1	134.7	98.9	68.2	49.7	42.5	39.6	38.3	37.9	37.5
15°	242.5	192.4	131.3	82.9	51.8	40.8	37.9	35.4	34.1	33.7	33.3
17.5°	262.3	200.8	124.2	66.5	42.1	37.0	33.7	31.6	29.9	29.5	29.5
20°	280.8	208.0	112.0	51.8	37.9	33.3	29.9	27.4	25.7	25.3	25.3
22.5°	300.2	213.9	96.8	42.1	34.5	29.5	26.1	23.6	21.9	21.5	21.0
25°	320.8	218.1	79.6	37.5	31.2	26.1	22.3	20.2	18.9	18.5	18.1
27.5°	343.1	219.8	63.1	34.1	27.4	22.7	19.4	17.3	16.4	16.0	16.0
30°	363.3	218.1	48.8	30.3	24.0	19.8	16.8	15.2	14.3	13.9	13.9
32.5°	384.4	213.9	39.2	26.9	21.0	16.8	14.3	13.1	12.6	12.2	12.2
35°	406.7	208.4	33.7	24.0	18.1	14.7	12.6	11.8	11.4	10.9	10.9
37.5°	432.8	201.7	30.7	21.5	16.0	13.1	10.9	10.5	10.1	10.1	10.1
40°	462.2	193.2	28.6	19.4	14.3	11.4	9.7	9.3	8.8	8.8	8.8
42.5°	493.4	183.6	26.5	17.3	12.6	9.7	8.4	8.4	8.0	8.0	7.6
45°	528.3	173.9	24.4	15.2	10.9	8.4	7.2	6.7	6.7	6.3	6.3
47.5°	569.6	165.0	22.3	13.5	9.7	7.2	6.3	5.9	5.5	5.1	5.1
50°	627.7	164.2	19.8	11.8	8.8	5.9	5.1	4.6	4.2	3.8	3.8
52.5°	685.4	156.6	16.8	9.7	7.2	5.1	3.8	3.4	2.9	2.9	2.5
55°	698.4	144.0	14.7	8.4	5.5	3.8	2.9	2.1	2.1	1.7	1.7
57.5°	727.1	138.1	12.6	6.7	4.2	2.9	1.7	1.3	1.3	1.3	1.3
60°	783.5	136.4	10.9	5.9	2.9	2.1	1.3	0.8	0.8	0.4	0.4
62.5°	861.3	134.7	9.3	5.1	2.1	1.3	0.8	0.4	0.0	0.0	0.0
65°	904.3	123.4	7.6	3.8	1.7	1.3	0.4	0.0	0.0	0.0	0.0
67.5°	892.9	101.9	6.7	2.5	1.3	0.8	0.4	0.0	0.0	0.0	0.0
69°	845.3	85.9	5.5	2.1	1.3	0.8	0.4	0.0	0.0	0.0	0.0
70°	788.1	74.1	5.1	1.7	0.8	0.4	0.4	0.0	0.0	0.0	0.0
72.5°	559.5	38.7	3.4	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0
75°	261.4	17.3	2.1	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0
77.5°	57.7	8.0	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	10.9	2.9	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.8	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	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)