

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: P348792

Luminaire Tested: **ARCH-N-PA1-10-830-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348792  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-10-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1414 lumens  
Efficiency: N/A  
Efficacy: 101.0 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

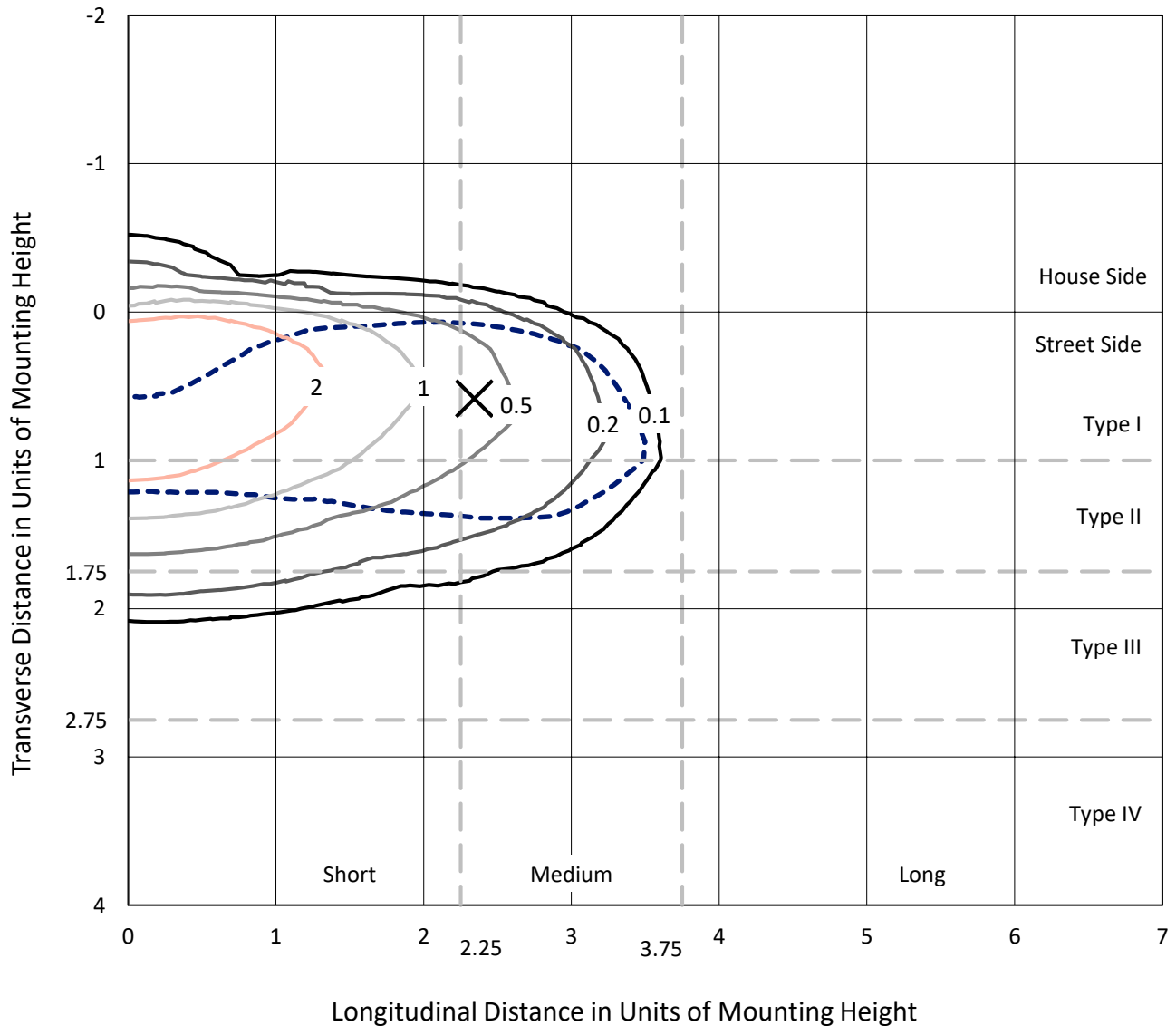
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

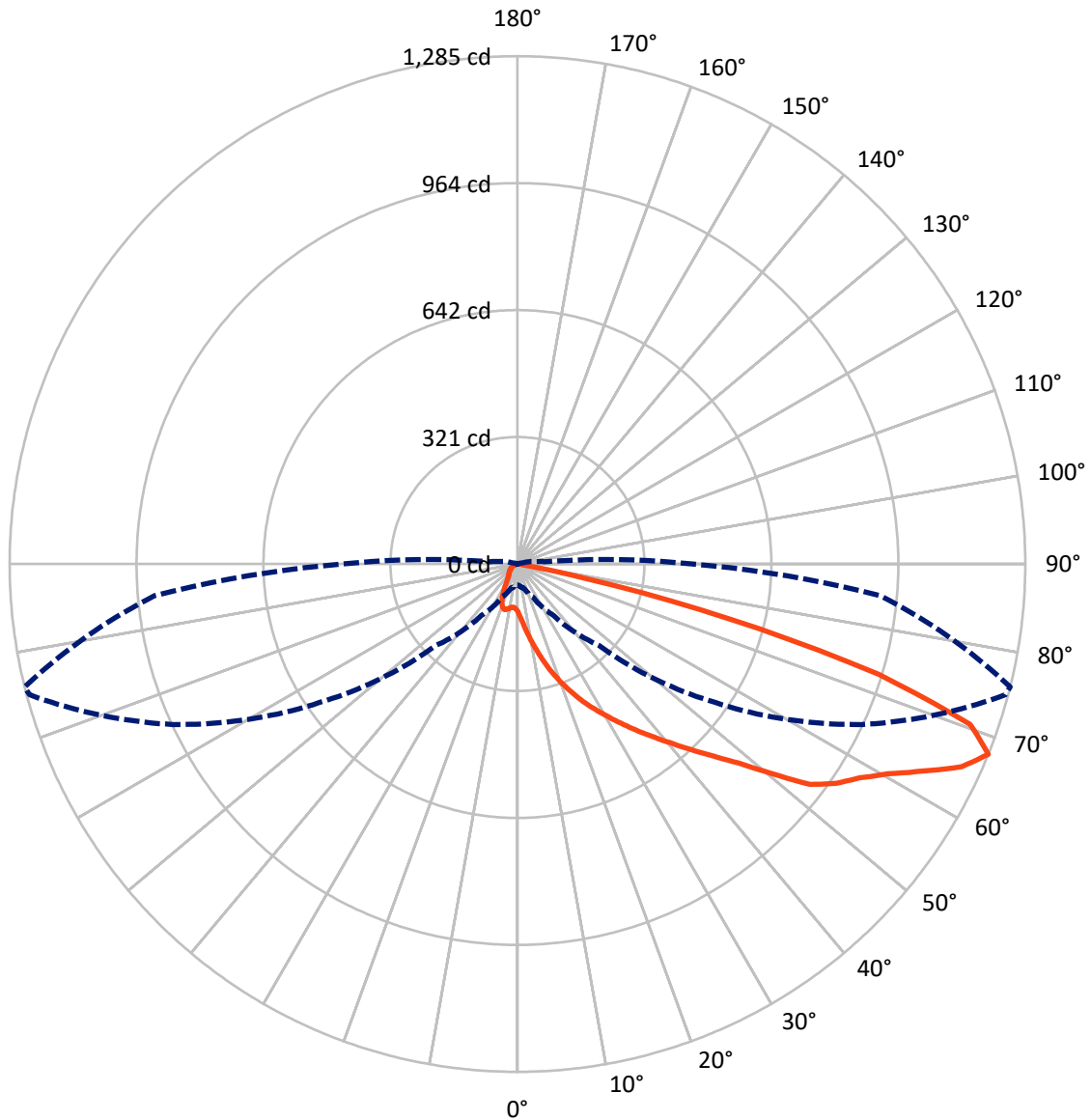
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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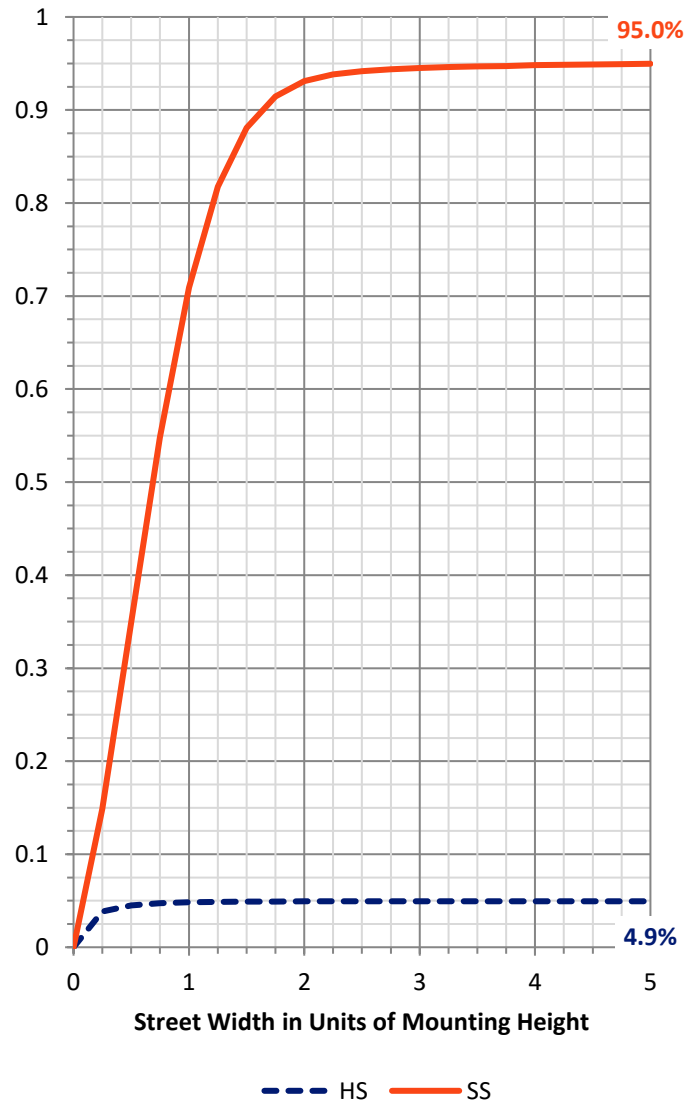
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	70.2	0.0	70.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	1343.8	0.0	1343.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	1414.0	0.0	1414.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.9	1.1
10°-20°	59.1	4.2
20°-30°	120.3	8.5
30°-40°	208.8	14.8
40°-50°	295.0	20.9
50°-60°	334.6	23.7
60°-70°	277.5	19.6
70°-80°	100.5	7.1
80°-90°	3.3	0.2
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°	1414.0	100.0
0°-180°	1414.0	100.0

**Coefficient of Utilization**



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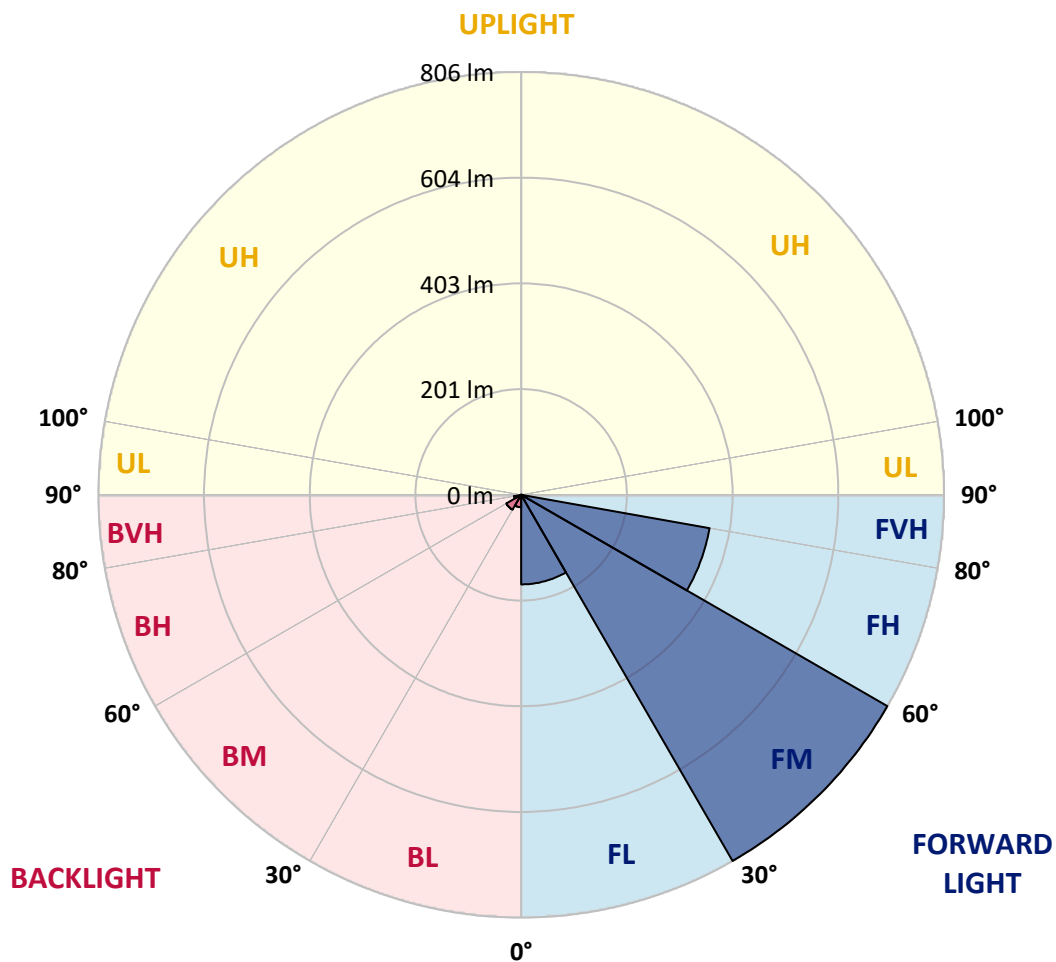
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	170.7	12.1			
FM	(30°-60°)	805.5	57.0			
FH	(60°-80°)	364.4	25.8			G0/660
FVH	(80°-90°)	3.2	0.2			G0/10
BL	(0°-30°)	23.7	1.7	B0/110		
BM	(30°-60°)	32.9	2.3	B0/220		
BH	(60°-80°)	13.6	1.0	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°	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
2.5°	179.1	175.0	176.0	173.4	168.6	159.0	150.7	142.9	133.8	133.5	126.0
5°	241.4	238.0	237.6	232.3	223.8	207.4	191.4	173.2	152.8	151.4	135.4
7.5°	298.1	295.3	294.4	288.1	272.2	256.2	235.4	208.6	176.8	174.1	148.1
10°	341.6	340.3	340.5	336.1	322.4	307.6	280.2	246.1	204.0	199.8	163.4
12.5°	374.5	374.8	377.1	374.3	366.7	355.7	326.5	286.1	234.1	228.4	180.8
15°	398.8	400.3	404.4	407.8	407.2	397.7	370.9	326.6	266.1	259.7	200.2
17.5°	414.4	416.2	422.1	429.7	436.6	434.4	413.8	365.8	298.4	291.1	220.9
20°	428.2	430.2	436.6	446.6	459.5	462.3	448.8	403.8	330.7	321.7	242.4
22.5°	458.0	457.9	461.8	467.6	480.0	487.2	478.6	439.0	362.6	353.3	264.2
25°	511.9	509.8	508.5	503.9	506.6	511.1	506.3	472.0	394.7	385.2	286.4
27.5°	575.9	577.2	566.2	553.8	544.3	539.7	531.9	502.5	425.6	415.2	308.1
30°	643.5	643.9	630.9	615.2	594.2	576.8	563.2	531.7	457.3	446.0	329.2
32.5°	704.5	702.1	689.2	667.8	641.3	621.7	593.6	564.3	490.9	479.9	352.6
35°	752.8	750.0	734.3	714.8	687.3	667.6	633.8	596.8	526.2	515.5	376.1
37.5°	788.2	784.8	768.7	748.6	724.9	713.4	680.5	632.2	564.7	553.2	400.8
40°	800.4	797.5	787.4	772.7	753.6	751.0	730.0	672.9	606.7	594.4	428.8
42.5°	793.1	790.3	786.7	781.7	773.8	776.3	776.7	719.3	653.3	641.2	459.7
45°	764.1	761.6	765.3	772.5	782.4	794.7	819.3	769.2	705.3	692.4	495.5
47.5°	721.4	719.6	729.8	747.9	776.8	810.6	858.3	821.6	763.7	751.8	540.1
50°	660.7	660.4	681.0	714.0	758.3	818.3	898.6	881.2	844.9	832.3	602.1
52.5°	566.2	566.8	607.2	660.1	725.9	813.1	924.5	957.8	939.3	926.3	655.8
55°	476.1	479.9	508.5	584.7	676.2	793.7	933.4	993.5	991.4	979.0	685.7
57.5°	388.0	394.7	422.4	493.5	603.6	749.2	928.5	1009.0	1030.2	1020.7	725.1
60°	292.4	295.5	327.4	393.9	510.5	667.9	893.0	1017.5	1083.3	1076.7	782.3
62.5°	186.1	193.8	222.1	286.2	397.5	555.0	833.1	1017.3	1149.6	1153.2	856.1
65°	98.0	107.1	122.1	177.4	273.2	428.9	743.1	1007.8	1231.0	1236.0	913.7
67.5°	52.8	55.5	63.4	92.1	158.4	290.6	610.8	960.7	1278.2	1284.8	921.8
70°	38.7	40.1	43.1	50.9	79.7	168.8	445.7	853.9	1217.4	1214.9	819.0
72.5°	29.7	31.9	34.1	37.3	45.8	90.1	277.5	668.7	971.4	955.0	612.2
75°	23.4	23.8	27.0	29.8	34.4	51.3	123.2	389.5	592.9	554.1	317.5
77.5°	18.7	19.0	20.8	23.3	27.6	33.7	38.2	153.2	189.3	168.9	68.9
80°	11.1	11.7	15.5	18.0	22.9	21.3	13.9	33.3	29.6	26.8	11.6
82.5°	6.2	6.7	8.7	14.2	16.0	10.2	6.9	9.0	6.9	6.8	3.3
85°	0.0	0.3	5.6	8.8	6.5	2.2	2.9	3.0	2.0	1.9	1.3
87.5°	0.0	0.0	1.7	1.7	0.2	0.4	0.7	1.0	0.8	0.8	0.7
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°	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
2.5°	122.3	119.0	112.6	106.4	101.2	97.0	93.1	91.6	90.3	90.1	89.2
5°	127.8	121.0	108.9	99.0	92.4	87.7	83.6	81.2	79.2	78.5	77.8
7.5°	136.0	125.8	108.4	97.0	89.1	81.2	73.7	65.7	60.7	58.7	57.6
10°	146.0	132.1	110.3	96.5	82.6	65.9	53.5	43.3	39.2	37.8	37.4
12.5°	157.7	140.0	113.5	93.0	68.7	46.8	36.9	33.5	32.5	32.1	32.1
15°	171.2	148.6	115.8	83.0	50.8	35.4	32.0	30.4	29.4	28.8	28.9
17.5°	184.9	157.0	114.7	68.4	37.5	31.5	28.9	27.2	25.8	25.3	25.2
20°	198.8	164.8	108.5	50.9	31.7	28.6	25.7	23.8	22.4	21.9	21.7
22.5°	213.2	171.4	97.6	37.4	28.5	25.3	22.6	20.6	19.3	18.8	18.6
25°	227.2	176.8	82.3	30.2	25.5	22.3	19.6	17.8	16.7	16.2	16.1
27.5°	240.3	180.2	64.7	26.7	22.8	19.6	17.2	15.6	14.6	14.2	14.1
30°	252.0	180.5	47.8	24.1	20.4	17.2	15.0	13.6	12.7	12.3	12.2
32.5°	263.9	177.9	34.8	21.7	18.3	15.2	13.0	11.9	11.3	11.0	11.0
35°	275.1	171.9	27.1	19.7	16.2	13.2	11.5	10.7	10.3	10.0	10.0
37.5°	286.1	163.3	23.0	17.9	14.2	11.5	10.1	9.6	9.3	9.0	9.0
40°	297.3	152.5	20.9	16.2	12.6	10.2	9.0	8.6	8.2	8.0	7.9
42.5°	311.0	140.0	19.6	14.7	11.2	9.0	7.9	7.4	7.2	6.9	6.8
45°	326.8	129.2	18.5	13.1	10.0	8.1	6.9	6.4	6.0	5.7	5.6
47.5°	349.7	121.4	17.0	11.5	8.9	7.0	5.9	5.4	4.8	4.5	4.5
50°	378.9	114.9	15.1	10.0	7.7	5.9	5.0	4.3	3.8	3.5	3.5
52.5°	393.4	106.5	13.3	8.7	6.5	5.0	4.0	3.2	3.0	2.7	2.7
55°	399.2	100.1	11.6	7.4	5.4	4.2	3.2	2.5	2.3	2.1	2.0
57.5°	415.5	98.2	10.1	6.3	4.5	3.3	2.4	1.9	1.7	1.5	1.5
60°	441.9	99.1	8.7	5.3	3.6	2.5	1.8	1.4	1.3	1.1	1.1
62.5°	470.3	98.0	7.4	4.6	2.8	1.9	1.2	1.1	1.1	0.6	0.6
65°	475.8	87.2	6.3	3.8	2.2	1.4	0.8	0.7	0.9	0.1	0.0
67.5°	441.6	67.7	5.5	2.9	1.6	1.1	0.6	0.3	0.8	0.0	0.0
70°	353.1	43.0	4.4	2.1	1.2	0.9	0.5	0.1	0.6	0.0	0.0
72.5°	249.7	25.0	3.5	1.5	1.1	0.7	0.4	0.0	0.4	0.0	0.0
75°	126.3	13.3	2.2	1.1	0.8	0.5	0.2	0.0	0.1	0.0	0.0
77.5°	27.3	6.2	1.4	0.8	0.6	0.3	0.1	0.0	0.0	0.0	0.0
80°	5.9	2.7	0.9	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0
82.5°	2.2	1.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.2	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.2	0.1	0.1	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)