

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: P214797

Luminaire Tested: **ARCH-AF24-20-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
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-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2085.8 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

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

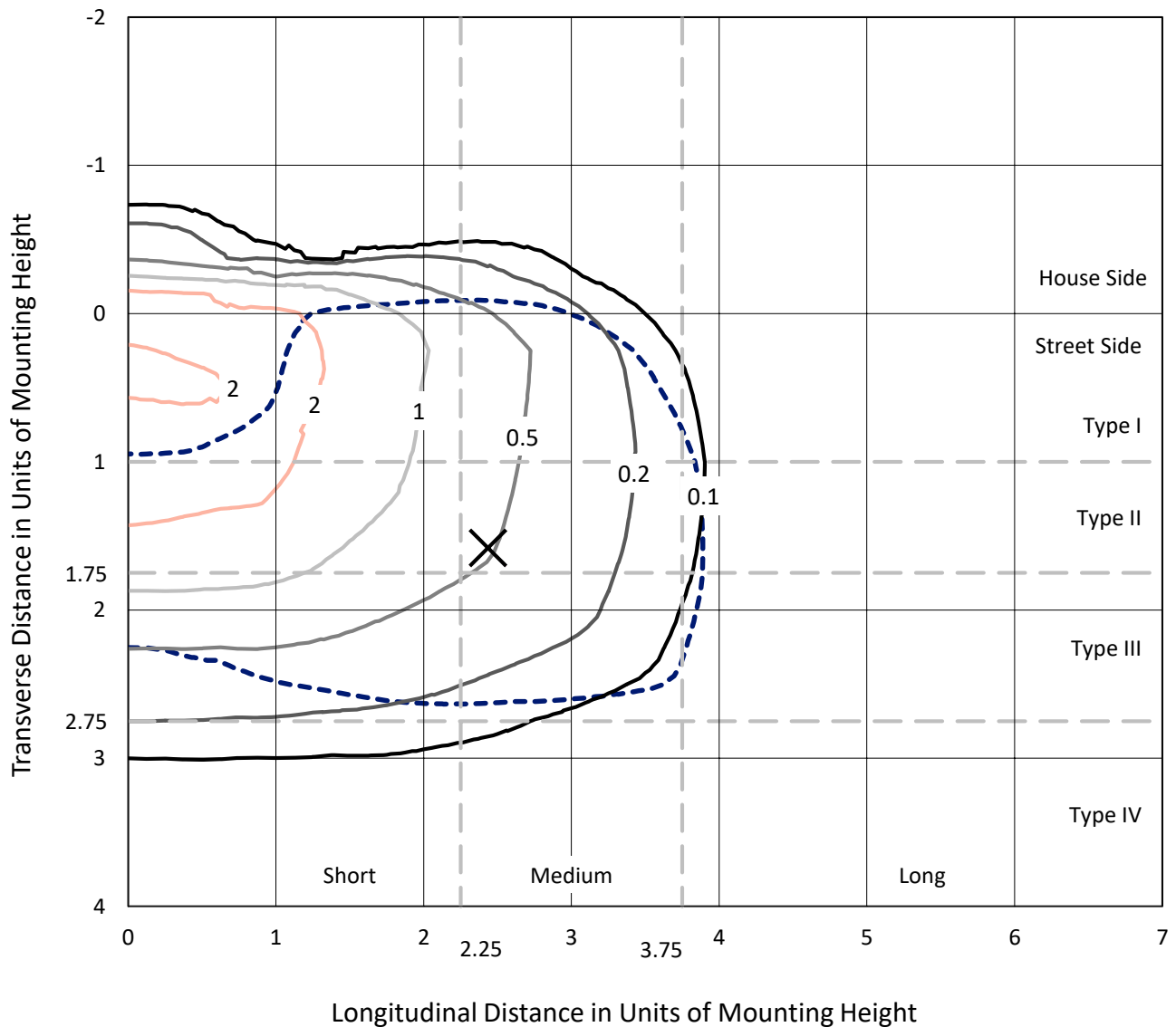


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

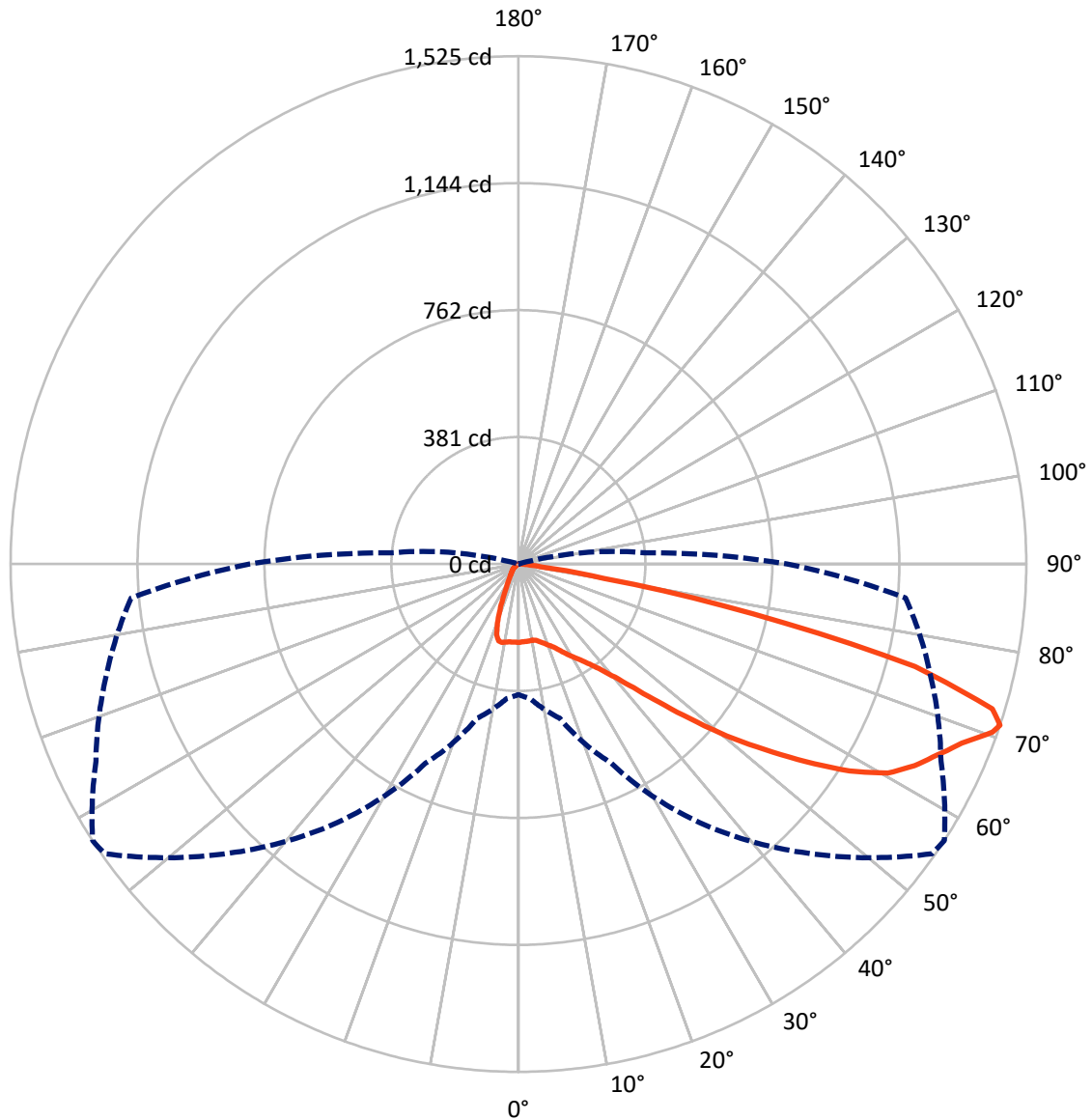


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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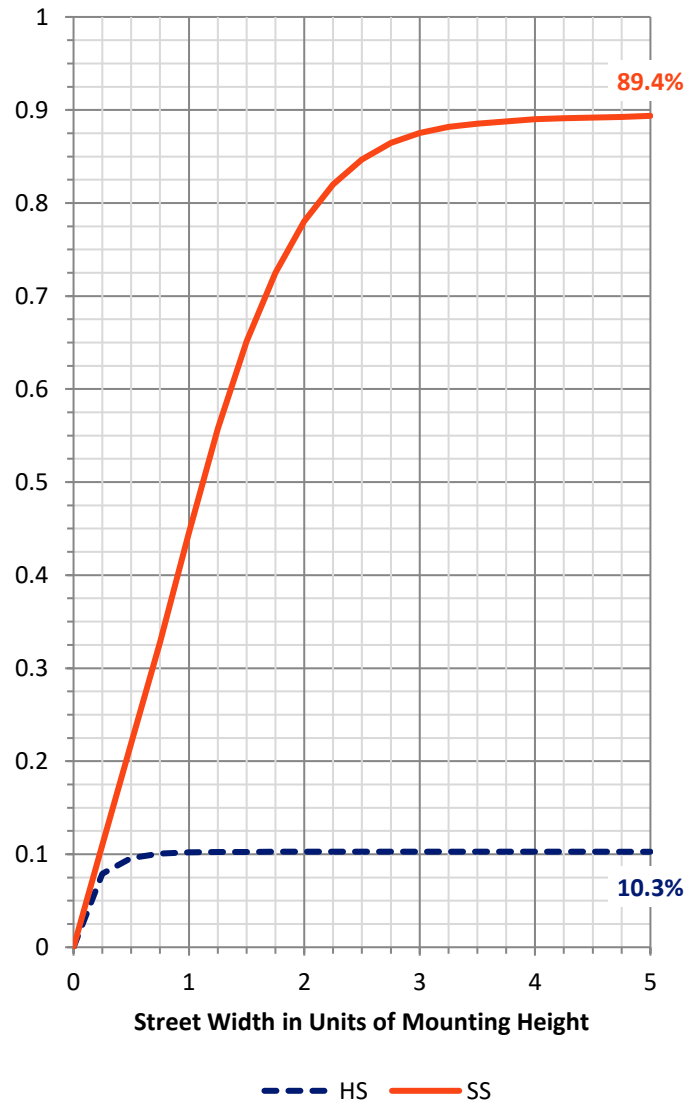
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	216.2	0.0	216.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	1869.6	0.0	1869.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	2085.8	0.0	2085.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.1	1.1
10°-20°	59.2	2.8
20°-30°	92.3	4.4
30°-40°	156.1	7.5
40°-50°	303.1	14.5
50°-60°	509.0	24.4
60°-70°	607.5	29.1
70°-80°	320.1	15.3
80°-90°	16.3	0.8
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°	2085.8	100.0
0°-180°	2085.8	100.0



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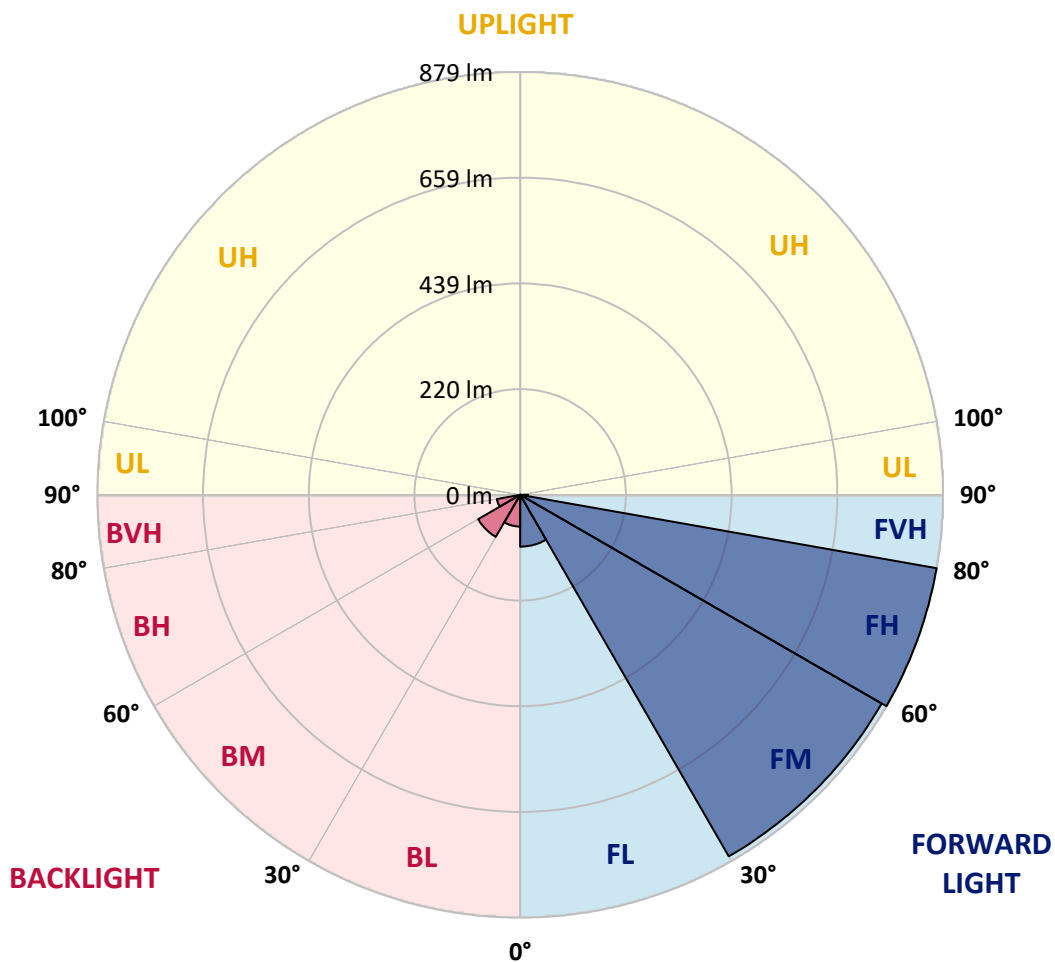
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	107.7	5.2			
FM	(30°-60°)	867.3	41.6			
FH	(60°-80°)	878.5	42.1			G1/1800
FVH	(80°-90°)	16.1	0.8			G1/100
BL	(0°-30°)	66.0	3.2	B0/110		
BM	(30°-60°)	100.9	4.8	B0/220		
BH	(60°-80°)	49.1	2.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7
2.5°	232.3	232.3	232.3	232.8	233.3	233.3	234.3	233.7	233.7	233.7	234.8
5°	226.0	226.5	227.0	227.9	229.9	231.4	233.7	233.7	234.3	235.3	235.7
7.5°	217.3	217.8	219.2	221.2	225.0	228.4	232.3	233.3	234.8	237.2	238.1
10°	212.0	212.9	214.8	217.3	221.7	226.0	230.9	232.3	236.7	241.1	243.5
12.5°	210.4	210.9	212.9	216.8	222.1	227.5	233.7	235.3	241.5	248.4	252.3
15°	212.9	213.4	214.3	218.7	225.0	231.8	240.1	242.0	249.8	257.6	262.5
17.5°	217.3	217.3	218.2	222.1	228.9	236.7	247.3	250.3	259.0	267.8	273.1
20°	220.1	220.1	221.7	225.6	233.3	243.5	256.1	260.0	269.8	279.5	284.4
22.5°	223.1	223.6	225.0	229.4	238.1	252.3	266.8	270.7	281.9	292.2	297.0
25°	231.4	230.9	231.4	235.3	245.4	262.9	281.4	286.3	298.0	309.1	311.6
27.5°	254.2	253.2	246.9	244.5	252.3	274.2	299.9	304.7	318.3	329.5	329.5
30°	306.7	304.7	289.2	269.2	262.9	284.4	317.4	324.2	341.7	351.4	348.5
32.5°	373.3	368.9	348.9	315.0	289.7	298.0	335.8	343.6	366.0	374.2	368.0
35°	446.2	445.7	420.9	377.2	341.2	326.1	359.7	368.9	397.1	404.4	394.1
37.5°	523.4	525.4	508.9	448.6	406.3	372.3	391.3	401.9	436.5	445.2	435.5
40°	609.5	609.0	602.7	531.2	484.6	437.9	436.9	446.6	488.5	502.1	488.5
42.5°	718.3	717.4	694.6	630.3	579.4	523.4	503.5	507.0	553.6	575.9	556.0
45°	829.2	822.4	796.2	740.7	695.5	629.4	591.5	591.5	631.4	662.0	630.9
47.5°	890.9	884.1	873.4	842.8	829.2	755.3	699.4	692.6	723.7	754.8	711.1
50°	972.1	972.1	945.3	933.6	957.0	905.0	818.5	811.7	826.7	851.5	794.2
52.5°	1036.2	1024.6	1005.6	1015.8	1082.4	1058.5	937.5	924.4	936.1	942.4	866.6
55°	1062.9	1051.8	1050.4	1087.7	1190.8	1157.8	1059.6	1047.9	1046.9	1015.8	929.8
57.5°	1068.3	1058.5	1077.1	1142.6	1296.3	1238.9	1181.1	1172.3	1145.1	1067.3	994.4
60°	1023.1	1028.0	1072.7	1172.8	1358.5	1309.4	1283.6	1274.4	1211.7	1111.0	1066.3
62.5°	930.3	941.9	1025.5	1175.7	1335.7	1338.0	1340.5	1334.1	1263.2	1150.9	1138.7
65°	820.4	823.8	924.4	1135.4	1295.8	1329.3	1382.3	1381.8	1302.5	1195.6	1220.5
67.5°	676.1	681.9	769.0	999.3	1216.1	1325.4	1437.2	1435.7	1347.3	1246.7	1269.1
70°	503.1	510.4	580.8	777.1	1038.2	1276.8	1509.2	1510.1	1394.4	1285.5	1235.5
71°	392.2	405.4	479.3	660.0	947.3	1227.7	1515.9	1524.7	1399.8	1280.2	1166.5
72.5°	192.5	208.1	300.8	464.6	779.6	1117.9	1471.2	1488.2	1366.3	1213.6	997.4
75°	50.0	53.0	89.9	190.1	418.0	740.7	1186.4	1229.7	1116.9	923.9	609.5
77.5°	31.6	32.5	42.2	73.9	156.5	281.4	696.9	718.3	638.1	468.0	214.8
80°	22.4	22.8	26.7	47.7	91.3	82.1	250.8	260.0	230.9	124.0	38.4
82.5°	13.6	13.6	19.4	30.6	56.4	44.7	66.1	70.5	62.2	34.5	12.7
85°	7.8	8.3	12.2	20.9	26.7	21.9	24.8	26.3	26.7	22.8	5.3
87.5°	6.3	6.9	10.7	17.5	14.6	10.7	10.7	11.2	11.7	13.6	2.5
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°	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7	235.7
2.5°	234.8	234.8	235.3	234.8	234.8	234.8	235.3	235.3	235.3	236.2	236.7
5°	235.7	235.7	235.7	235.3	234.8	234.8	235.7	236.2	236.2	237.6	237.6
7.5°	238.1	238.1	237.2	236.2	235.3	233.7	234.3	234.8	234.3	234.8	234.8
10°	243.5	243.5	242.0	240.1	237.2	232.8	227.0	219.7	212.9	210.4	209.5
12.5°	252.3	251.7	248.9	245.4	239.2	224.0	202.2	176.5	155.1	149.2	147.3
15°	262.0	261.0	257.6	251.7	234.8	194.9	149.2	116.2	95.7	90.8	89.9
17.5°	272.2	270.7	265.9	254.2	214.8	144.8	96.3	72.9	61.7	60.8	61.3
20°	282.8	280.9	274.2	249.3	173.5	96.8	62.2	56.4	55.4	55.4	55.9
22.5°	295.0	292.6	283.4	231.8	126.3	64.1	53.5	53.0	52.5	52.0	52.0
25°	309.1	306.2	292.2	200.3	87.0	52.5	51.0	49.6	48.6	47.7	47.2
27.5°	326.1	322.2	298.9	161.3	59.7	49.1	48.1	45.7	43.8	41.8	41.8
30°	343.1	338.3	297.0	121.5	48.6	45.7	43.8	40.8	38.0	36.0	35.5
32.5°	361.1	356.3	284.4	81.6	44.2	41.8	39.4	35.0	31.6	29.2	28.6
35°	387.9	384.0	259.5	53.9	39.9	36.9	33.6	29.2	24.8	22.4	21.9
37.5°	427.7	422.9	228.9	41.3	35.0	30.6	27.7	22.8	18.5	16.1	15.5
40°	481.2	466.6	192.5	36.4	30.6	25.3	21.4	16.6	13.1	11.7	11.7
42.5°	543.4	508.9	153.1	33.0	27.2	20.9	15.5	11.2	9.2	8.8	8.8
45°	609.5	548.2	113.8	30.6	23.8	16.6	11.2	7.8	6.9	6.3	6.3
47.5°	677.5	580.3	79.2	27.7	19.9	12.7	7.8	5.8	4.9	4.4	4.4
50°	741.2	601.2	55.9	24.8	17.0	9.2	5.8	4.4	3.4	3.4	3.4
52.5°	785.4	599.2	40.3	21.4	13.1	6.3	3.9	3.0	3.0	3.0	3.0
55°	824.3	592.0	31.6	18.5	10.2	4.4	3.0	2.5	2.5	1.9	1.9
57.5°	857.3	580.3	26.7	15.0	7.3	3.4	1.9	1.9	1.4	1.4	1.4
60°	885.6	565.8	22.4	12.7	4.9	2.5	1.4	1.0	1.0	0.5	1.0
62.5°	923.9	556.5	19.4	9.7	3.4	1.4	1.0	0.5	0.5	0.0	0.0
65°	952.2	539.0	16.6	6.9	1.9	1.0	0.5	0.5	0.0	0.0	0.0
67.5°	953.1	507.4	12.2	3.9	1.4	1.0	0.5	0.0	0.0	0.0	0.0
70°	876.4	432.6	7.8	1.9	1.0	0.5	0.5	0.0	0.0	0.0	0.0
71°	805.9	383.0	6.3	1.4	1.0	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	663.9	281.4	4.9	1.4	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	366.0	102.1	2.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	117.1	31.1	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.9	4.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.9	1.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)