

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: P214937

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
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-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2047.9 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

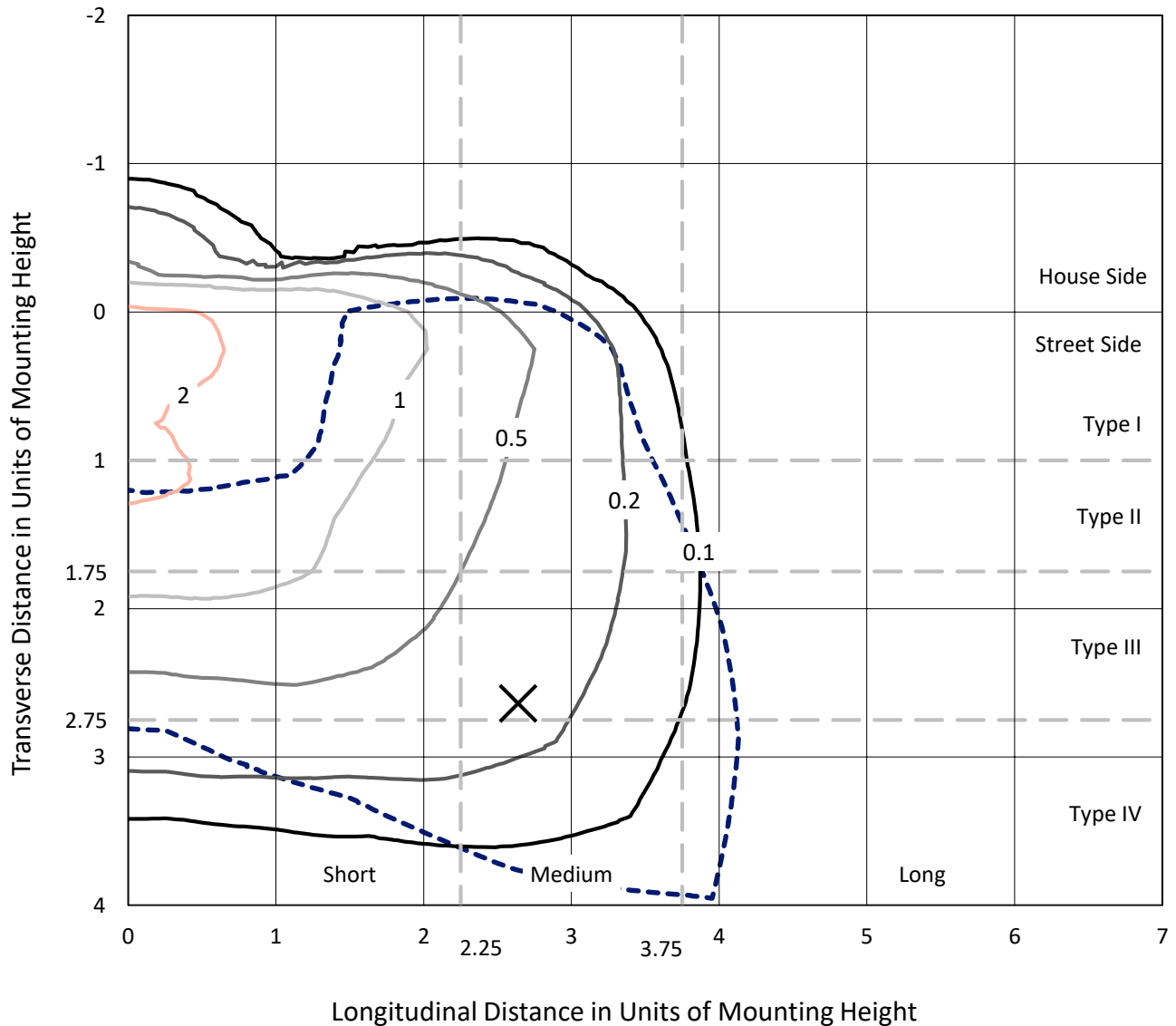
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

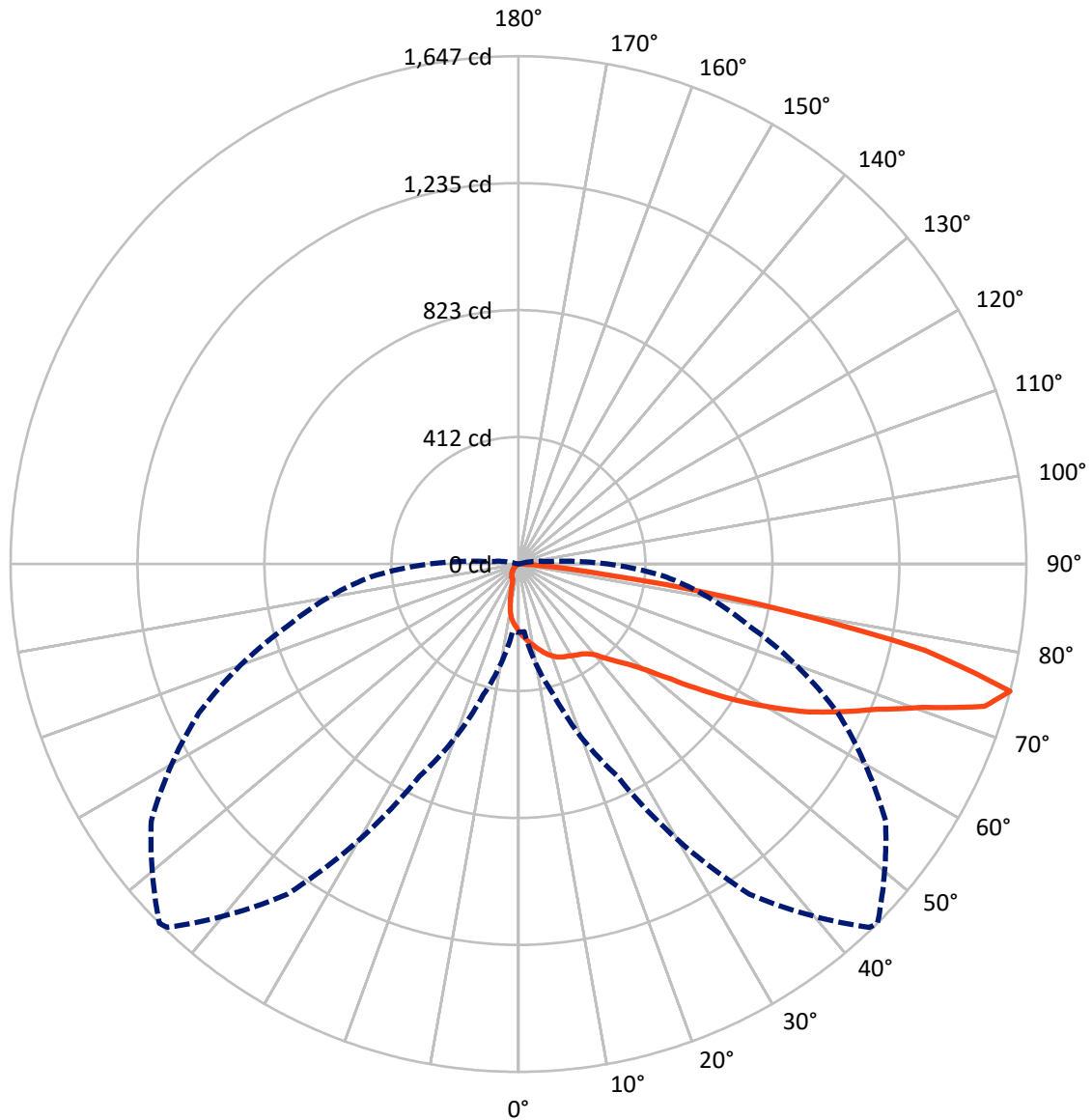
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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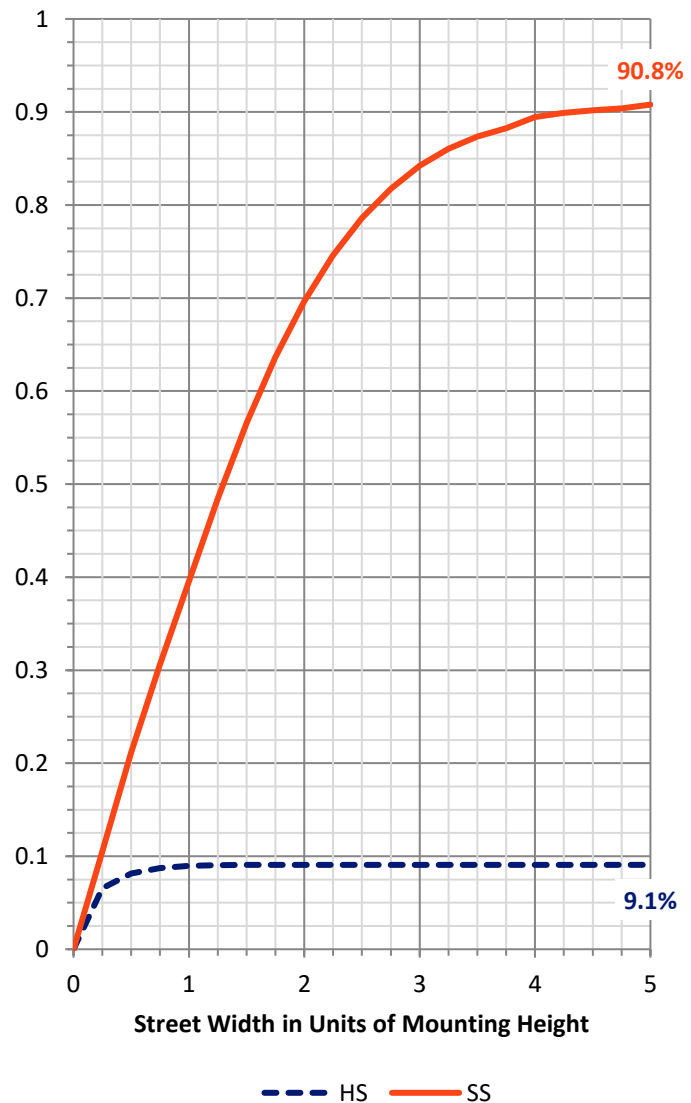
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	187.3	0.0	187.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	1860.6	0.0	1860.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	2047.9	0.0	2047.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.7	1.0
10°-20°	58.6	2.9
20°-30°	97.0	4.7
30°-40°	140.4	6.9
40°-50°	229.8	11.2
50°-60°	409.5	20.0
60°-70°	602.1	29.4
70°-80°	454.2	22.2
80°-90°	35.6	1.7
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°	2047.9	100.0
0°-180°	2047.9	100.0



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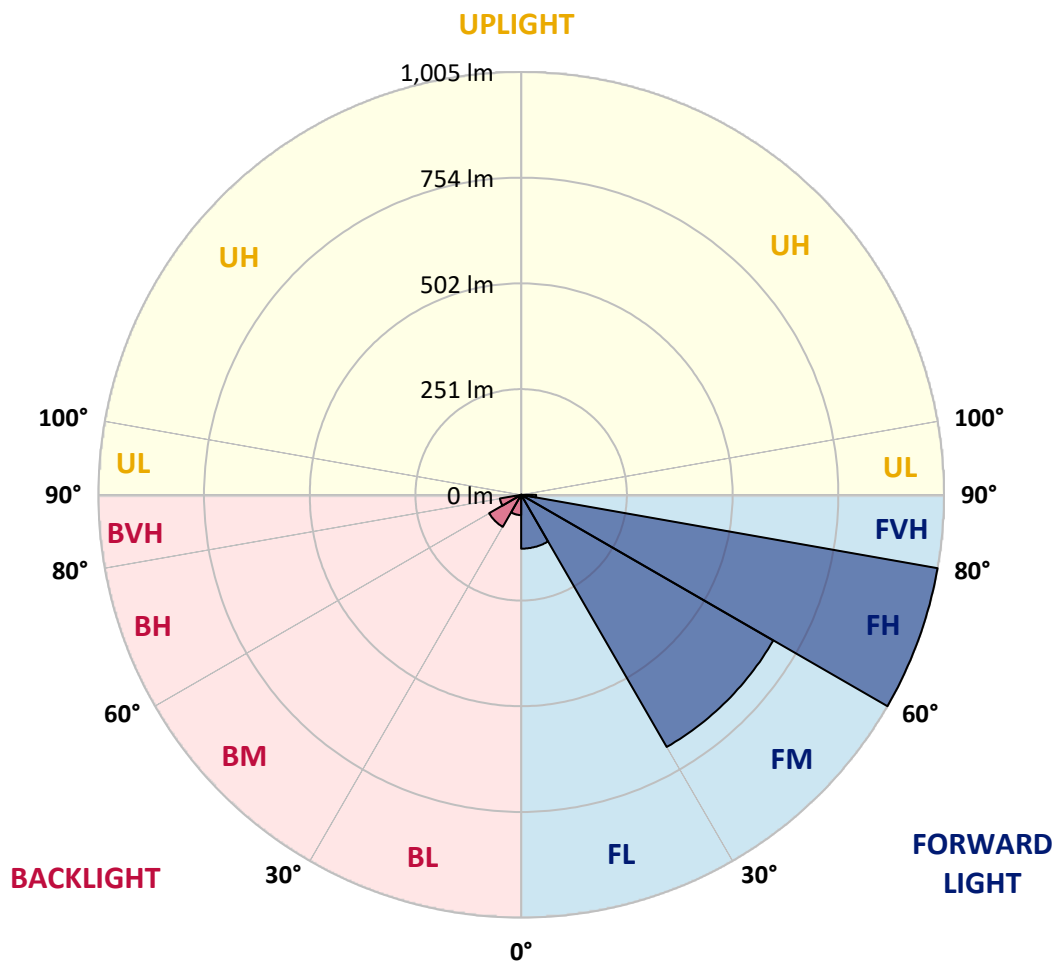
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	128.1	6.3			
FM	(30°-60°)	692.0	33.8			
FH	(60°-80°)	1005.0	49.1			G1/1800
FVH	(80°-90°)	35.5	1.7			G1/100
BL	(0°-30°)	48.1	2.4	B0/110		
BM	(30°-60°)	87.8	4.3	B0/220		
BH	(60°-80°)	51.3	2.5	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-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0
2.5°	237.9	237.9	237.4	237.0	234.6	232.1	231.6	230.2	225.9	222.9	220.0
5°	257.8	258.3	257.3	254.9	249.6	244.3	243.8	239.9	231.6	225.9	219.5
7.5°	276.7	277.6	275.3	270.9	264.6	256.9	256.4	249.1	238.4	230.2	221.0
10°	292.7	292.7	289.3	284.0	277.2	268.9	268.0	259.7	247.7	237.4	225.4
12.5°	310.2	309.6	304.8	297.6	289.8	282.0	281.5	271.4	259.7	246.6	231.6
15°	326.1	325.2	318.9	312.1	303.8	295.6	295.1	285.0	272.8	257.3	240.8
17.5°	334.8	334.4	328.6	321.8	315.0	308.7	308.2	297.6	284.5	268.4	250.0
20°	336.3	336.8	331.9	326.1	322.2	318.9	318.9	309.1	295.1	278.1	259.7
22.5°	336.8	338.3	334.8	327.1	326.1	326.6	327.5	319.9	305.2	289.3	270.0
25°	340.2	342.2	339.7	330.5	329.5	333.0	333.9	330.5	317.4	301.5	281.5
27.5°	347.0	348.9	347.0	335.3	333.9	337.3	338.3	340.2	330.5	313.0	293.7
30°	360.6	361.0	356.7	342.2	339.2	343.6	345.0	350.4	342.6	324.2	305.2
32.5°	384.3	379.4	366.3	347.0	344.5	349.4	350.9	356.7	353.7	334.8	317.4
35°	432.7	407.5	377.5	353.7	351.4	356.2	358.1	366.3	367.9	349.8	332.5
37.5°	432.3	409.5	403.7	366.8	363.5	366.8	369.3	379.4	385.2	369.8	354.2
40°	462.8	453.1	453.1	391.6	380.4	385.2	387.7	397.8	408.1	395.9	379.9
42.5°	558.7	552.4	545.6	439.1	404.2	417.8	419.2	425.4	437.6	433.7	414.8
45°	665.8	660.0	633.8	519.5	444.9	447.3	450.7	460.8	478.3	485.6	463.3
47.5°	749.7	743.9	721.6	616.4	508.3	487.0	487.0	506.9	534.0	552.4	531.1
50°	817.0	810.3	796.7	719.6	612.5	544.2	541.3	564.6	604.8	633.4	618.8
52.5°	882.5	862.6	854.4	826.2	730.3	627.1	619.3	635.8	691.5	726.9	714.7
55°	926.1	923.2	914.4	924.1	853.9	727.8	721.1	724.5	794.2	818.1	803.0
57.5°	966.8	966.3	985.7	1030.7	988.6	843.2	832.6	827.3	893.6	887.8	900.9
60°	1017.2	1008.4	1053.5	1118.0	1112.2	955.6	943.5	932.8	969.7	953.2	1018.1
62.5°	1019.6	1017.2	1108.8	1201.4	1234.8	1070.0	1056.0	1017.6	1036.0	1017.2	1130.1
65°	927.0	939.2	1132.0	1245.4	1337.5	1170.4	1153.4	1093.7	1095.2	1082.6	1261.9
67.5°	906.2	912.5	1068.1	1292.9	1411.7	1271.6	1255.6	1181.4	1164.0	1164.9	1340.0
70°	854.4	864.1	988.6	1289.5	1470.3	1406.8	1390.8	1310.4	1268.2	1221.2	1279.8
72.5°	652.7	669.2	833.0	1130.6	1454.3	1583.6	1579.3	1473.7	1309.9	1121.4	968.2
75°	221.0	220.4	437.6	759.3	1306.5	1637.9	1646.6	1453.3	1142.6	773.5	480.7
77.5°	47.5	48.0	90.1	307.7	867.9	1315.2	1348.7	1096.2	737.0	344.5	110.0
80°	23.2	23.7	37.3	81.4	347.0	737.5	789.9	563.5	272.3	68.8	18.4
82.5°	11.7	12.1	19.3	43.2	128.4	262.2	280.1	207.5	78.1	38.8	9.2
85°	4.4	4.4	9.7	25.7	58.6	61.6	75.6	60.0	47.1	31.5	2.5
87.5°	0.9	0.9	5.3	12.6	26.2	19.3	19.3	18.4	28.5	21.3	0.9
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°	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0	219.0
2.5°	218.6	216.7	213.2	209.8	207.5	204.5	203.1	201.6	201.1	200.6	201.6
5°	216.1	213.2	206.9	201.6	196.7	192.8	190.0	187.1	185.6	184.6	185.2
7.5°	216.1	211.8	202.5	194.4	186.6	178.3	170.1	163.8	159.0	156.0	156.5
10°	218.6	212.8	200.6	189.5	174.9	157.5	139.5	126.0	116.8	111.5	111.5
12.5°	223.9	216.1	201.1	183.6	159.0	128.4	101.3	84.8	78.1	74.2	74.7
15°	231.2	222.0	203.6	175.9	136.7	95.4	70.8	60.0	60.0	61.1	61.6
17.5°	239.4	229.2	205.5	164.3	108.0	68.3	55.8	54.7	56.3	58.6	58.6
20°	247.7	236.5	206.4	145.9	80.9	54.3	52.8	52.8	53.8	56.3	56.7
22.5°	257.8	245.7	205.5	123.1	60.6	51.4	50.8	50.8	50.8	53.8	53.8
25°	268.4	256.4	201.6	98.8	51.4	49.4	48.9	48.5	48.5	50.8	51.4
27.5°	280.6	267.5	192.4	75.6	48.5	47.5	47.1	46.0	46.0	48.0	48.0
30°	292.7	280.1	178.3	57.2	46.0	45.5	44.6	43.6	42.7	44.6	44.6
32.5°	305.8	293.2	159.9	45.5	42.7	42.7	42.1	40.7	39.7	40.7	41.2
35°	323.3	308.2	139.1	39.7	38.3	38.3	38.3	37.8	35.9	36.8	36.8
37.5°	346.5	329.1	114.9	36.8	34.9	34.0	34.0	34.0	32.4	32.9	32.9
40°	376.0	353.2	91.6	34.4	32.4	30.1	29.1	29.6	28.5	28.5	28.1
42.5°	416.2	379.4	68.8	32.4	30.5	27.1	25.2	24.8	23.7	23.2	23.2
45°	473.9	411.4	49.4	30.5	29.1	23.7	21.8	20.4	17.9	16.5	16.5
47.5°	548.6	447.7	36.8	28.5	27.6	20.9	18.4	15.5	12.1	11.2	11.2
50°	639.7	488.5	31.0	25.7	25.2	18.4	14.5	10.1	6.8	5.8	6.3
52.5°	728.3	526.7	27.6	22.8	22.3	16.0	10.6	5.3	2.9	2.9	2.9
55°	803.0	553.9	25.2	20.4	19.3	12.6	5.8	2.5	1.4	1.4	1.4
57.5°	870.3	569.4	22.8	17.9	15.5	8.7	2.5	0.9	0.9	0.5	0.5
60°	931.9	578.6	19.8	15.5	12.1	4.8	0.9	0.5	0.5	0.0	0.0
62.5°	992.5	585.4	17.0	12.6	9.2	1.9	0.5	0.5	0.0	0.0	0.0
65°	1038.5	583.0	13.6	10.1	5.8	0.9	0.5	0.0	0.0	0.0	0.0
67.5°	1037.1	550.0	10.1	7.8	2.9	0.5	0.0	0.0	0.0	0.0	0.0
70°	927.5	463.3	6.8	4.8	0.9	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	658.1	297.1	4.4	2.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	289.8	90.1	2.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	56.7	20.9	1.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	13.6	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	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)