

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: P234753

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234753
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-AF16-30-D-U-T4W-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2078 lumens
Efficiency: N/A
Efficacy: 64.9 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): 32
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

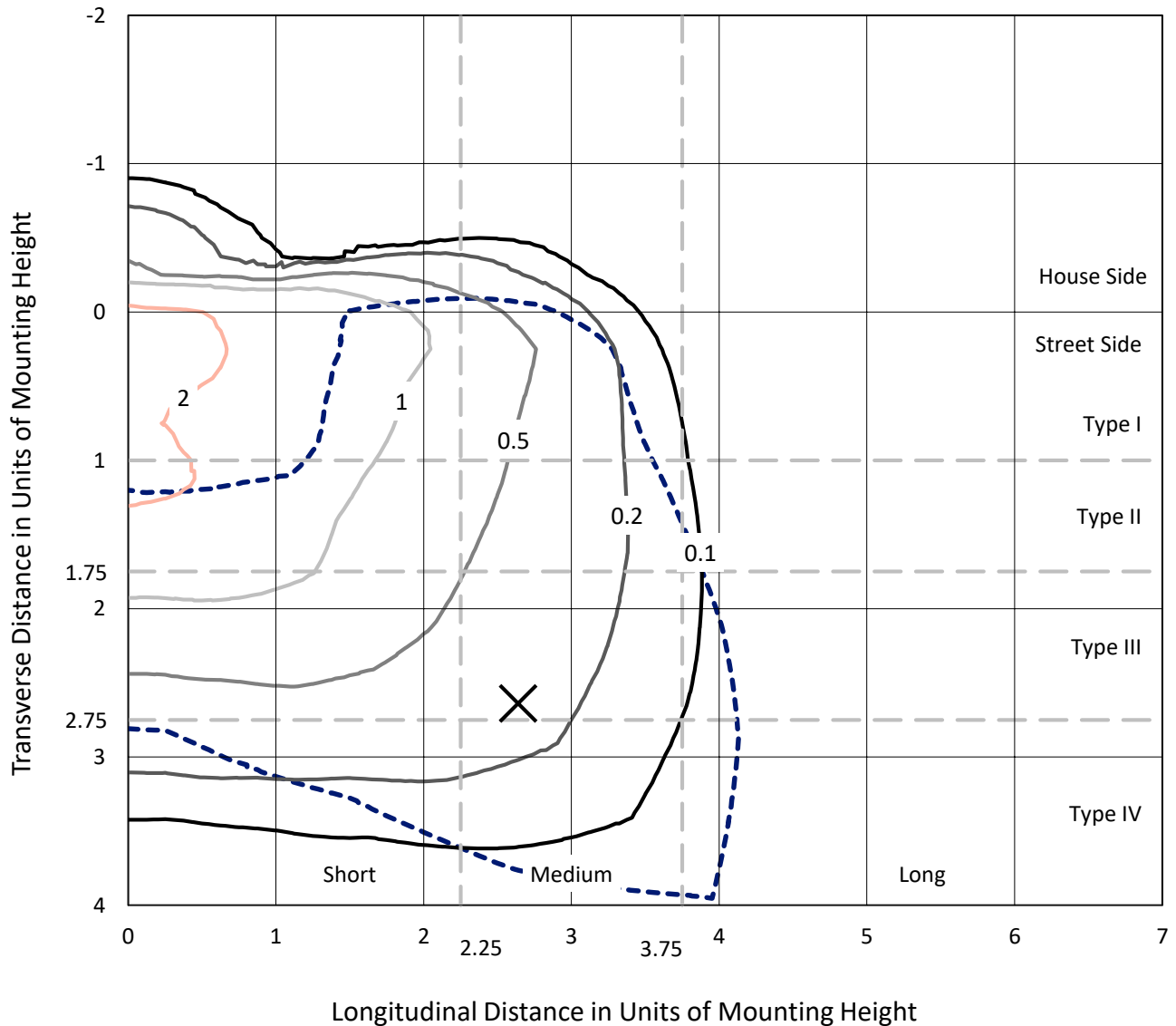


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

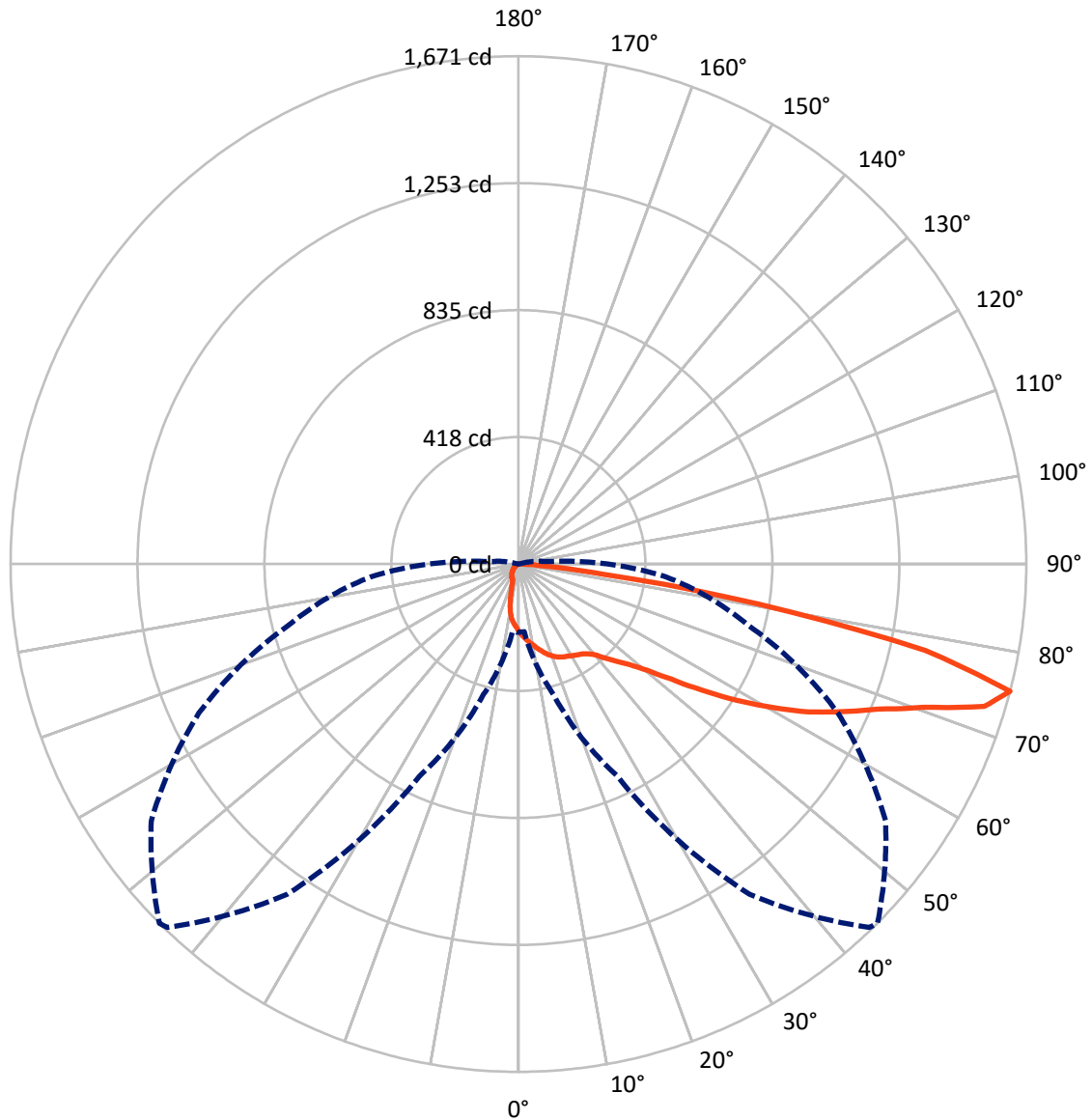


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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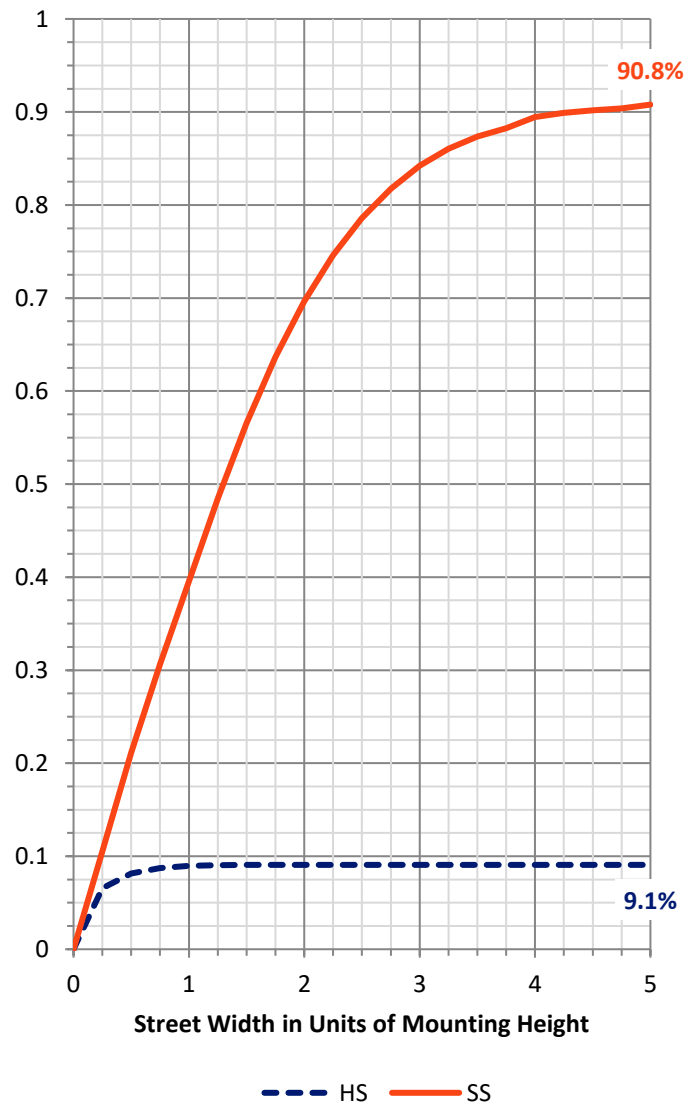
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	190.1	0.0	190.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	1887.9	0.0	1887.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	2078.0	0.0	2078.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.0	1.0
10°-20°	59.4	2.9
20°-30°	98.4	4.7
30°-40°	142.4	6.9
40°-50°	233.2	11.2
50°-60°	415.6	20.0
60°-70°	610.9	29.4
70°-80°	460.9	22.2
80°-90°	36.2	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°	2078.0	100.0
0°-180°	2078.0	100.0



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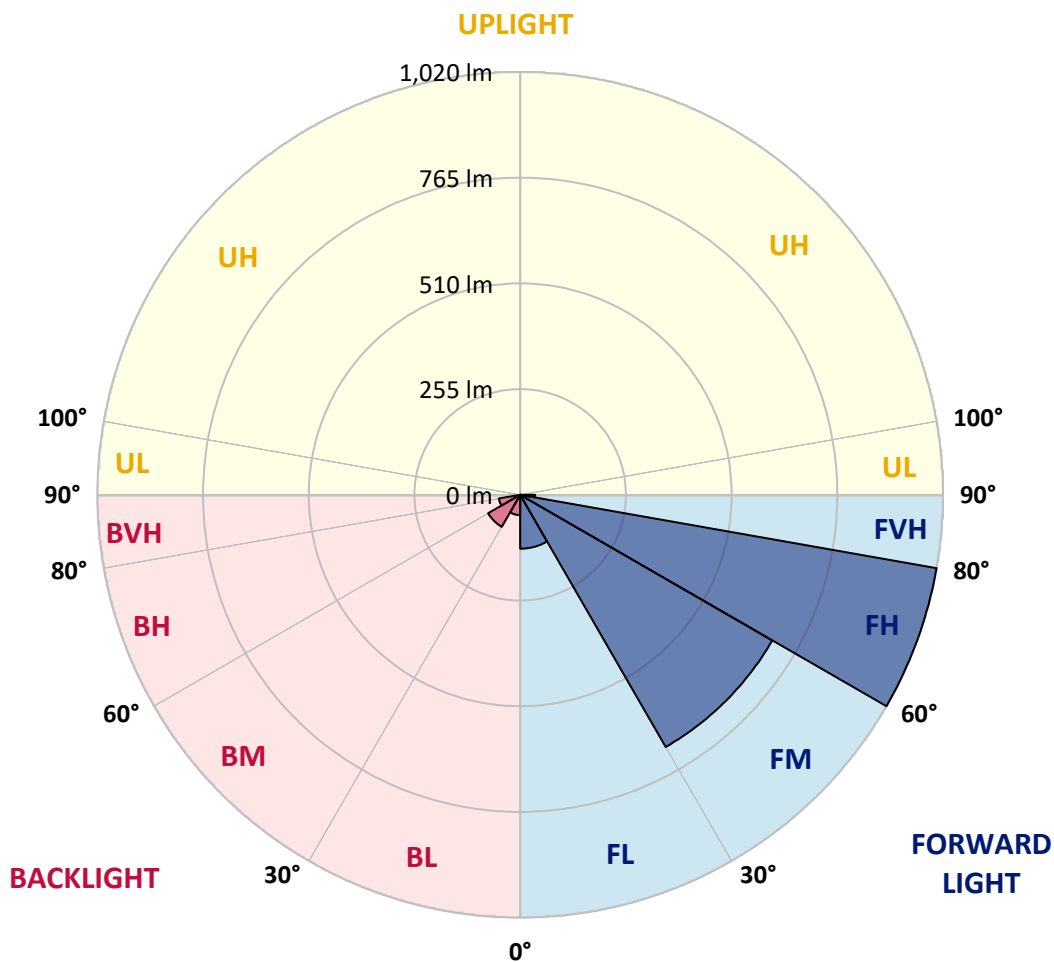
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	130.0	6.3			
FM	(30°-60°)	702.1	33.8			
FH	(60°-80°)	1019.8	49.1			G1/1800
FVH	(80°-90°)	36.1	1.7			G1/100
BL	(0°-30°)	48.8	2.4	B0/110		
BM	(30°-60°)	89.1	4.3	B0/220		
BH	(60°-80°)	52.1	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°	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3
2.5°	241.4	241.4	240.9	240.4	238.0	235.5	235.0	233.6	229.1	226.2	223.2
5°	261.6	262.1	261.1	258.6	253.2	247.8	247.3	243.4	235.0	229.1	222.7
7.5°	280.8	281.8	279.3	274.9	268.5	260.6	260.1	252.7	241.9	233.6	224.2
10°	297.0	297.0	293.6	288.1	281.3	272.9	271.9	263.6	251.3	240.9	228.6
12.5°	314.7	314.2	309.3	301.9	294.0	286.2	285.7	275.4	263.6	250.3	235.0
15°	330.9	329.9	323.5	316.7	308.3	299.9	299.5	289.1	276.8	261.1	244.4
17.5°	339.8	339.3	333.4	326.5	319.6	313.2	312.7	301.9	288.6	272.4	253.7
20°	341.2	341.7	336.8	330.9	327.0	323.5	323.5	313.7	299.5	282.2	263.6
22.5°	341.7	343.2	339.8	331.9	330.9	331.4	332.4	324.5	309.8	293.6	273.9
25°	345.2	347.1	344.7	335.3	334.4	337.8	338.8	335.3	322.1	305.8	285.7
27.5°	352.1	354.0	352.1	340.3	338.8	342.2	343.2	345.2	335.3	317.6	298.0
30°	365.8	366.3	361.9	347.1	344.2	348.6	350.1	355.5	347.6	329.0	309.8
32.5°	389.9	385.0	371.7	352.1	349.6	354.5	356.0	361.9	358.9	339.8	322.1
35°	439.1	413.5	383.0	358.9	356.5	361.4	363.4	371.7	373.2	355.0	337.3
37.5°	438.6	415.5	409.6	372.2	368.8	372.2	374.7	385.0	390.9	375.2	359.4
40°	469.6	459.7	459.7	397.3	386.0	390.9	393.4	403.7	414.0	401.7	385.5
42.5°	566.9	560.6	553.7	445.5	410.1	423.9	425.3	431.7	444.0	440.1	420.9
45°	675.6	669.7	643.2	527.1	451.4	453.8	457.3	467.6	485.3	492.7	470.1
47.5°	760.7	754.8	732.2	625.5	515.8	494.2	494.2	514.3	541.9	560.6	538.9
50°	829.0	822.1	808.4	730.2	621.5	552.2	549.2	572.8	613.7	642.7	627.9
52.5°	895.4	875.2	866.9	838.4	741.0	636.3	628.4	645.1	701.7	737.6	725.3
55°	939.7	936.7	927.9	937.7	866.4	738.5	731.7	735.1	805.9	830.0	814.8
57.5°	981.0	980.5	1000.1	1045.9	1003.1	855.6	844.8	839.4	906.7	900.8	914.1
60°	1032.1	1023.3	1069.0	1134.4	1128.5	969.7	957.4	946.5	983.9	967.2	1033.1
62.5°	1034.6	1032.1	1125.0	1219.0	1252.9	1085.7	1071.4	1032.6	1051.3	1032.1	1146.7
65°	940.6	952.9	1148.6	1263.7	1357.1	1187.5	1170.3	1109.8	1111.3	1098.5	1280.4
67.5°	919.5	925.9	1083.7	1311.9	1432.4	1290.2	1274.0	1198.8	1181.1	1182.1	1359.6
70°	866.9	876.7	1003.1	1308.4	1491.9	1427.4	1411.2	1329.6	1286.8	1239.1	1298.6
72.5°	662.3	679.1	845.3	1147.2	1475.6	1606.9	1602.5	1495.3	1329.1	1137.8	982.4
75°	224.2	223.7	444.0	770.5	1325.7	1662.0	1670.8	1474.6	1159.5	784.8	487.8
77.5°	48.2	48.7	91.5	312.2	880.7	1334.5	1368.4	1112.3	747.9	349.6	111.6
80°	23.6	24.1	37.9	82.6	352.1	748.4	801.5	571.9	276.3	69.8	18.7
82.5°	11.8	12.3	19.7	43.8	130.3	266.0	284.2	210.5	79.2	39.3	9.3
85°	4.4	4.4	9.8	26.1	59.5	62.4	76.7	61.0	47.7	32.0	2.5
87.5°	1.0	1.0	5.4	12.8	26.6	19.7	19.7	18.7	29.0	21.6	1.0
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°	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3	222.3
2.5°	221.8	219.8	216.4	212.9	210.5	207.5	206.0	204.6	204.1	203.6	204.6
5°	219.3	216.4	210.0	204.6	199.6	195.7	192.8	189.8	188.3	187.3	187.8
7.5°	219.3	214.9	205.5	197.2	189.3	180.9	172.6	166.2	161.3	158.3	158.8
10°	221.8	215.9	203.6	192.3	177.5	159.8	141.6	127.8	118.5	113.1	113.1
12.5°	227.2	219.3	204.1	186.4	161.3	130.3	102.8	86.0	79.2	75.2	75.7
15°	234.5	225.2	206.5	178.5	138.7	96.9	71.8	61.0	61.0	62.0	62.4
17.5°	242.9	232.6	208.5	166.7	109.7	69.3	56.5	55.6	57.0	59.5	59.5
20°	251.3	240.0	209.5	148.0	82.1	55.1	53.6	53.6	54.6	57.0	57.5
22.5°	261.6	249.3	208.5	124.9	61.5	52.1	51.6	51.6	51.6	54.6	54.6
25°	272.4	260.1	204.6	100.3	52.1	50.2	49.7	49.2	49.2	51.6	52.1
27.5°	284.7	271.4	195.2	76.7	49.2	48.2	47.7	46.7	46.7	48.7	48.7
30°	297.0	284.2	180.9	58.0	46.7	46.2	45.2	44.3	43.3	45.2	45.2
32.5°	310.3	297.5	162.3	46.2	43.3	43.3	42.8	41.3	40.3	41.3	41.8
35°	328.0	312.7	141.1	40.3	38.8	38.8	38.8	38.4	36.4	37.4	37.4
37.5°	351.6	333.9	116.5	37.4	35.4	34.4	34.4	34.4	32.9	33.4	33.4
40°	381.6	358.5	92.9	34.9	32.9	30.5	29.5	30.0	29.0	29.0	28.5
42.5°	422.4	385.0	69.8	32.9	31.0	27.5	25.6	25.1	24.1	23.6	23.6
45°	480.9	417.5	50.2	31.0	29.5	24.1	22.1	20.7	18.2	16.7	16.7
47.5°	556.6	454.3	37.4	29.0	28.0	21.1	18.7	15.7	12.3	11.3	11.3
50°	649.1	495.6	31.5	26.1	25.6	18.7	14.8	10.3	6.9	5.9	6.4
52.5°	739.0	534.5	28.0	23.1	22.6	16.2	10.8	5.4	3.0	3.0	3.0
55°	814.8	562.0	25.6	20.7	19.7	12.8	5.9	2.5	1.5	1.5	1.5
57.5°	883.1	577.8	23.1	18.2	15.7	8.9	2.5	1.0	1.0	0.5	0.5
60°	945.6	587.1	20.2	15.7	12.3	4.9	1.0	0.5	0.5	0.0	0.0
62.5°	1007.0	594.0	17.2	12.8	9.3	2.0	0.5	0.5	0.0	0.0	0.0
65°	1053.7	591.5	13.8	10.3	5.9	1.0	0.5	0.0	0.0	0.0	0.0
67.5°	1052.3	558.1	10.3	7.9	3.0	0.5	0.0	0.0	0.0	0.0	0.0
70°	941.1	470.1	6.9	4.9	1.0	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	667.7	301.4	4.4	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	294.0	91.5	2.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	57.5	21.1	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	13.8	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.5	0.5	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)