

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: P214938

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214938
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-AF24-30-D-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 375mA 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: 2867.3 lumens
Efficiency: N/A
Efficacy: 92.5 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

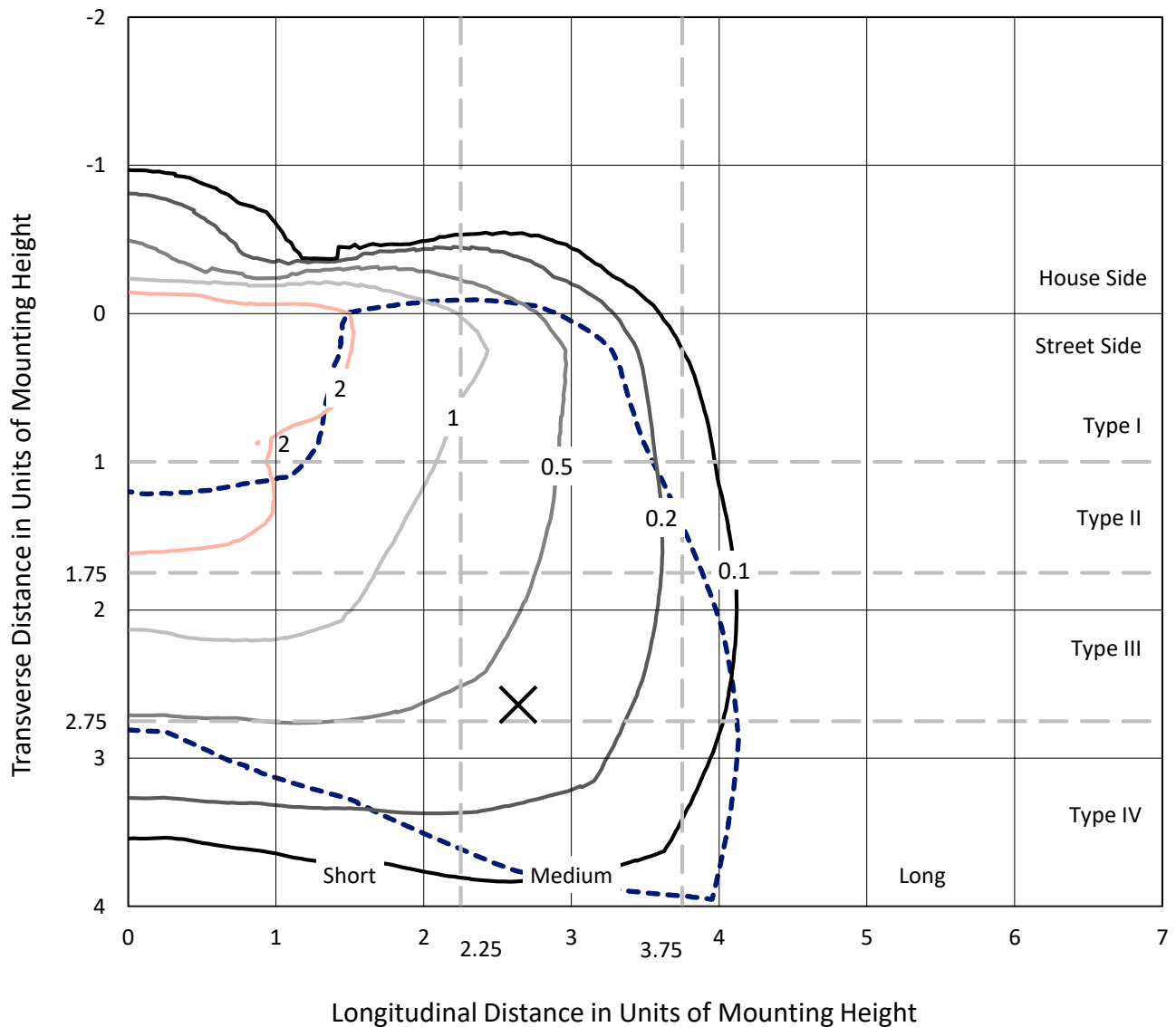
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

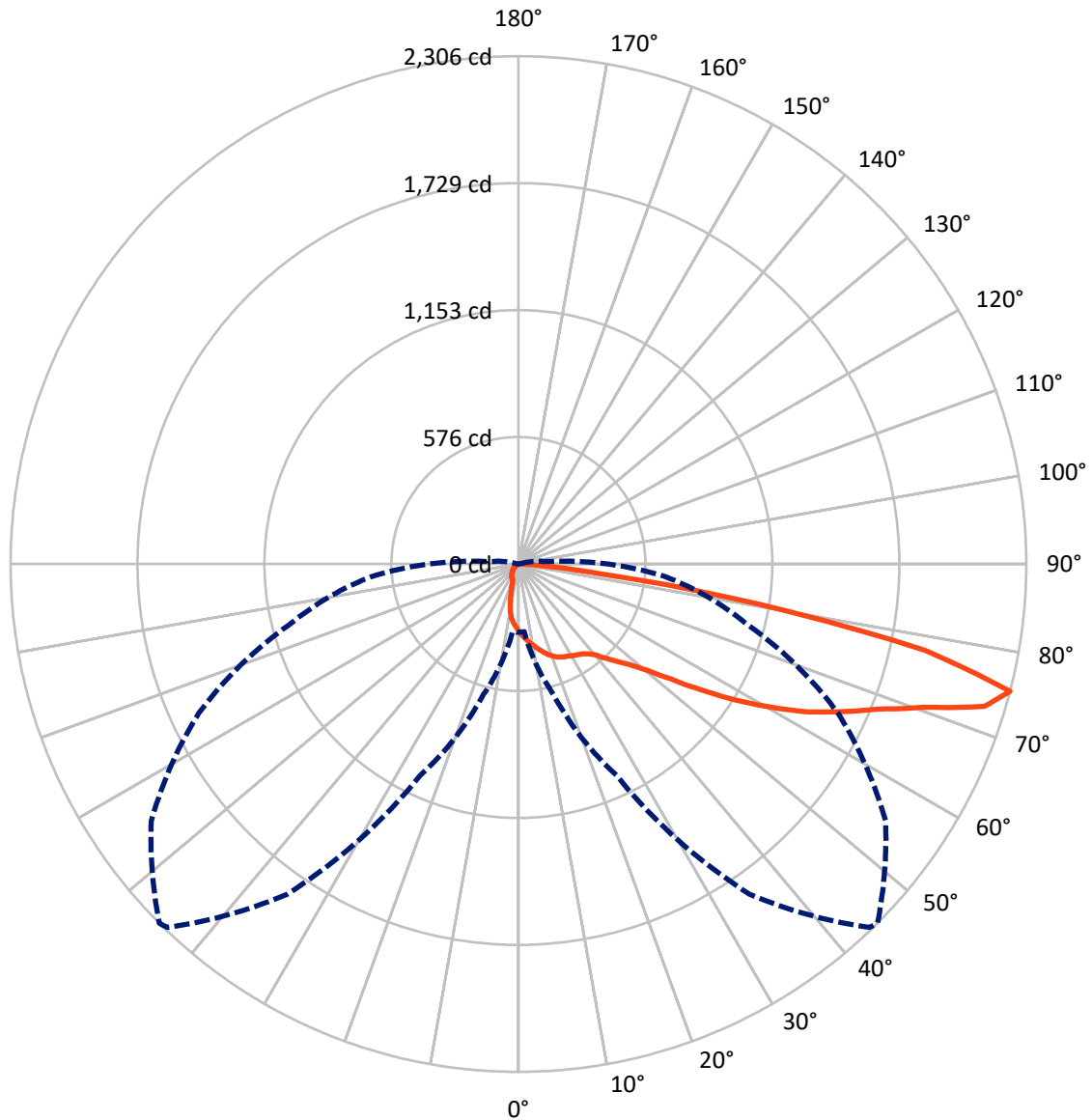
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.1 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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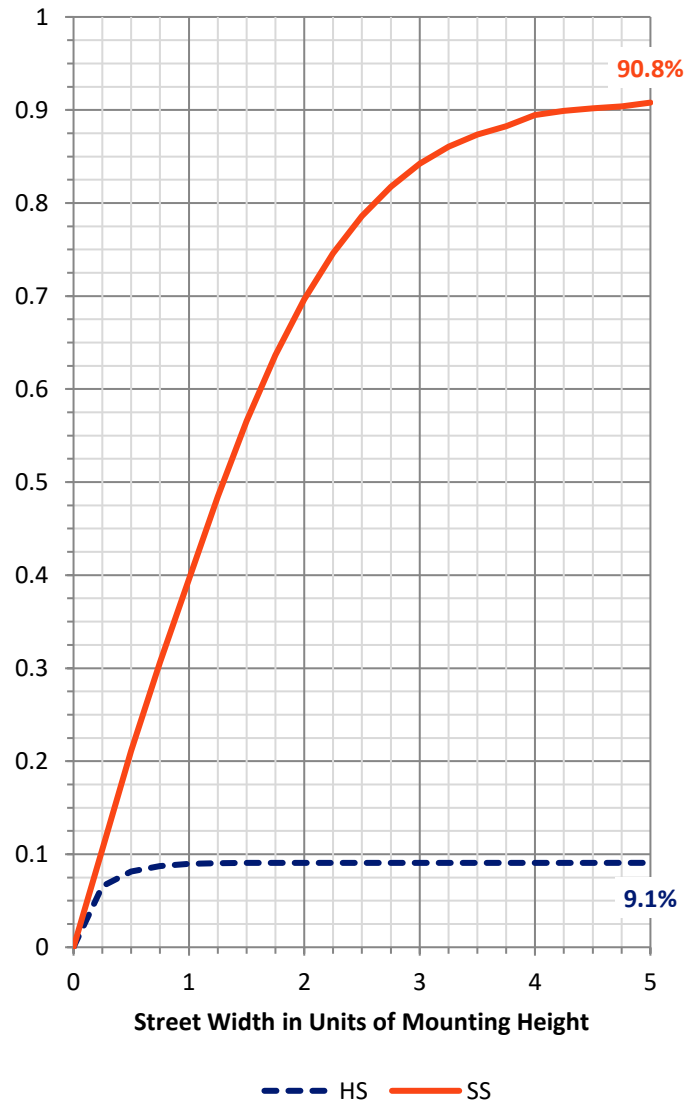
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	262.3	0.0	262.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2605.1	0.0	2605.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	2867.3	0.0	2867.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	1.0
10°-20°	82.0	2.9
20°-30°	135.8	4.7
30°-40°	196.5	6.9
40°-50°	321.8	11.2
50°-60°	573.4	20.0
60°-70°	843.0	29.4
70°-80°	636.0	22.2
80°-90°	49.9	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°	2867.3	100.0
0°-180°	2867.3	100.0



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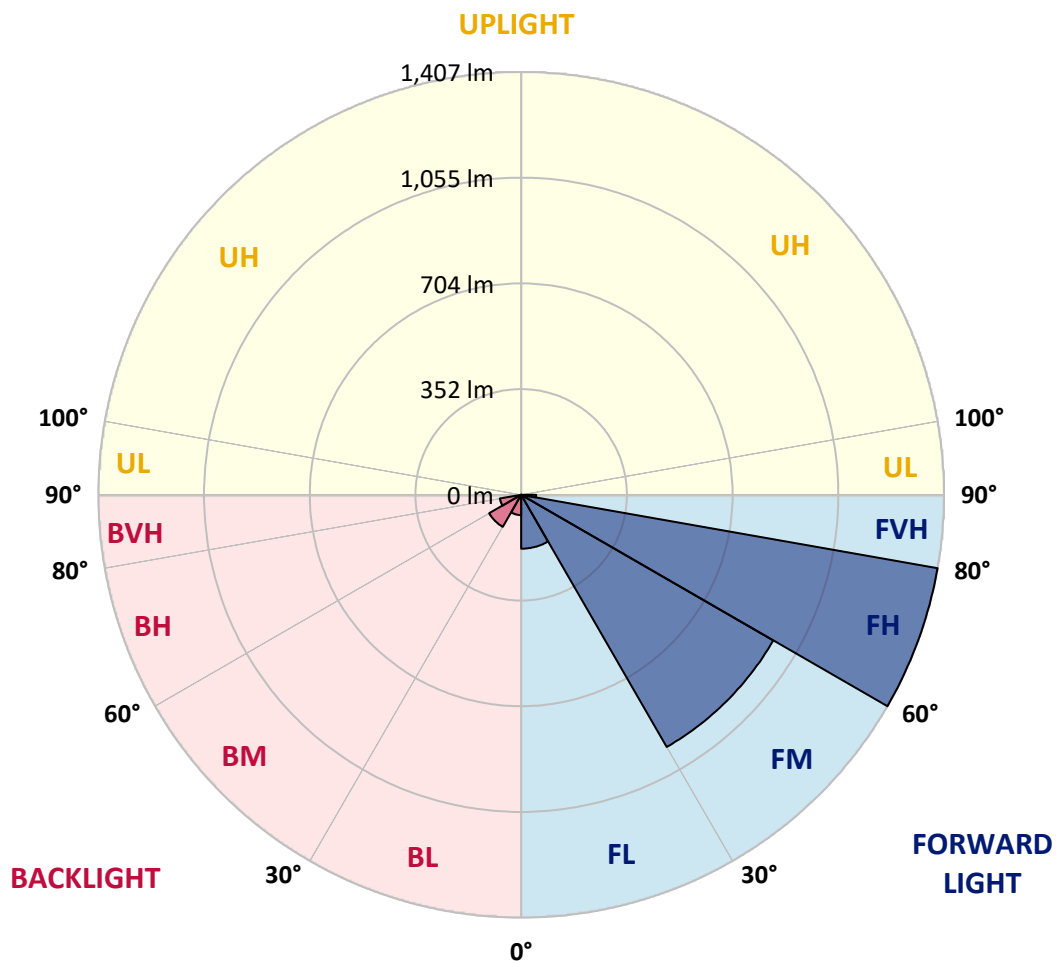
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	179.3	6.3			
FM	(30°-60°)	968.9	33.8			
FH	(60°-80°)	1407.1	49.1			G1/1800
FVH	(80°-90°)	49.8	1.7			G1/100
BL	(0°-30°)	67.4	2.4	B0/110		
BM	(30°-60°)	122.9	4.3	B0/220		
BH	(60°-80°)	71.8	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°	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7
2.5°	333.2	333.2	332.5	331.7	328.4	325.0	324.3	322.3	316.2	312.1	308.0
5°	361.0	361.6	360.3	356.9	349.4	342.0	341.3	335.8	324.3	316.2	307.4
7.5°	387.4	388.8	385.3	379.3	370.4	359.6	359.0	348.7	333.8	322.3	309.3
10°	409.8	409.8	405.1	397.6	388.1	376.5	375.2	363.7	346.7	332.5	315.5
12.5°	434.2	433.5	426.8	416.5	405.7	394.9	394.2	379.9	363.7	345.3	324.3
15°	456.6	455.3	446.4	436.9	425.4	413.9	413.2	399.0	382.0	360.3	337.2
17.5°	468.8	468.2	460.0	450.5	441.0	432.2	431.5	416.5	398.2	375.8	350.1
20°	470.9	471.6	464.7	456.6	451.2	446.4	446.4	432.9	413.2	389.4	363.7
22.5°	471.6	473.6	468.8	458.0	456.6	457.3	458.7	447.8	427.5	405.1	377.9
25°	476.3	479.0	475.6	462.7	461.4	466.2	467.5	462.7	444.4	422.1	394.2
27.5°	485.8	488.6	485.8	469.5	467.5	472.2	473.6	476.3	462.7	438.3	411.1
30°	504.8	505.4	499.4	479.0	475.0	481.1	483.0	490.5	479.7	453.9	427.5
32.5°	538.1	531.2	512.9	485.8	482.4	489.2	491.2	499.4	495.3	468.8	444.4
35°	605.9	570.6	528.6	495.3	491.9	498.7	501.5	512.9	515.0	489.9	465.4
37.5°	605.2	573.4	565.2	513.6	508.8	513.6	517.0	531.2	539.4	517.7	495.9
40°	647.9	634.4	634.4	548.2	532.7	539.4	542.8	557.0	571.3	554.3	531.9
42.5°	782.3	773.5	763.9	614.7	565.9	584.8	586.9	595.7	612.6	607.2	580.8
45°	932.2	924.1	887.5	727.3	622.9	626.3	631.0	645.3	669.6	679.9	648.7
47.5°	1049.6	1041.5	1010.3	863.1	711.8	681.9	681.9	709.7	747.7	773.5	743.6
50°	1144.0	1134.5	1115.4	1007.5	857.6	761.9	757.9	790.4	846.8	886.8	866.4
52.5°	1235.5	1207.7	1196.1	1156.9	1022.4	878.0	867.2	890.2	968.2	1017.7	1000.8
55°	1296.6	1292.5	1280.3	1293.8	1195.5	1019.1	1009.6	1014.4	1112.0	1145.3	1124.2
57.5°	1353.6	1353.0	1380.1	1443.2	1384.2	1180.6	1165.7	1158.2	1251.2	1243.0	1261.3
60°	1424.2	1412.0	1475.0	1565.3	1557.1	1338.0	1321.0	1306.1	1357.7	1334.5	1425.5
62.5°	1427.5	1424.2	1552.4	1681.9	1728.8	1498.1	1478.5	1424.9	1450.6	1424.2	1582.2
65°	1297.9	1314.9	1585.0	1743.7	1872.6	1638.6	1614.8	1531.4	1533.4	1515.7	1766.7
67.5°	1268.8	1277.6	1495.3	1810.2	1976.4	1780.3	1757.9	1654.1	1629.8	1631.1	1876.0
70°	1196.1	1209.7	1384.2	1805.4	2058.5	1969.7	1947.3	1834.7	1775.6	1709.8	1791.9
72.5°	913.9	937.0	1166.4	1582.9	2036.2	2217.3	2211.2	2063.3	1833.9	1570.0	1355.6
75°	309.3	308.7	612.6	1063.2	1829.2	2293.3	2305.5	2034.8	1599.9	1082.9	673.1
77.5°	66.5	67.2	126.2	430.9	1215.2	1841.4	1888.3	1534.7	1032.0	482.4	154.1
80°	32.5	33.2	52.3	114.0	485.8	1032.7	1105.9	789.1	381.4	96.4	25.8
82.5°	16.3	17.0	27.1	60.4	179.8	367.0	392.2	290.4	109.3	54.3	12.9
85°	6.1	6.1	13.6	36.0	82.1	86.1	105.9	84.1	65.8	44.1	3.4
87.5°	1.3	1.3	7.5	17.6	36.6	27.1	27.1	25.8	40.0	29.9	1.3
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°	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7	306.7
2.5°	306.0	303.3	298.5	293.8	290.4	286.3	284.3	282.2	281.6	280.9	282.2
5°	302.6	298.5	289.7	282.2	275.5	270.1	266.0	261.9	259.8	258.5	259.2
7.5°	302.6	296.5	283.6	272.1	261.3	249.7	238.1	229.3	222.6	218.5	219.1
10°	306.0	297.9	280.9	265.3	244.9	220.5	195.4	176.4	163.5	156.1	156.1
12.5°	313.4	302.6	281.6	257.2	222.6	179.8	141.8	118.8	109.3	103.8	104.4
15°	323.7	310.8	285.0	246.3	191.3	133.7	99.0	84.1	84.1	85.5	86.1
17.5°	335.2	320.9	287.7	230.0	151.3	95.6	78.1	76.6	78.7	82.1	82.1
20°	346.7	331.1	289.1	204.2	113.3	76.0	74.0	74.0	75.3	78.7	79.4
22.5°	361.0	344.0	287.7	172.4	84.8	71.9	71.2	71.2	71.2	75.3	75.3
25°	375.8	359.0	282.2	138.4	71.9	69.3	68.5	67.8	67.8	71.2	71.9
27.5°	392.8	374.5	269.3	105.9	67.8	66.5	65.8	64.4	64.4	67.2	67.2
30°	409.8	392.2	249.7	80.1	64.4	63.7	62.4	61.1	59.7	62.4	62.4
32.5°	428.1	410.5	223.9	63.7	59.7	59.7	59.0	57.0	55.6	57.0	57.7
35°	452.6	431.5	194.8	55.6	53.6	53.6	53.6	52.9	50.2	51.6	51.6
37.5°	485.1	460.7	160.8	51.6	48.9	47.5	47.5	47.5	45.4	46.1	46.1
40°	526.5	494.6	128.3	48.2	45.4	42.0	40.7	41.4	40.0	40.0	39.4
42.5°	582.8	531.2	96.4	45.4	42.8	38.0	35.3	34.6	33.2	32.5	32.5
45°	663.6	576.0	69.3	42.8	40.7	33.2	30.5	28.5	25.1	23.1	23.1
47.5°	768.0	627.0	51.6	40.0	38.7	29.2	25.8	21.7	17.0	15.7	15.7
50°	895.6	683.9	43.4	36.0	35.3	25.8	20.4	14.2	9.5	8.2	8.8
52.5°	1019.8	737.5	38.7	31.9	31.2	22.4	14.9	7.5	4.1	4.1	4.1
55°	1124.2	775.5	35.3	28.5	27.1	17.6	8.2	3.4	2.0	2.0	2.0
57.5°	1218.5	797.2	31.9	25.1	21.7	12.2	3.4	1.3	1.3	0.7	0.7
60°	1304.8	810.1	27.8	21.7	17.0	6.8	1.3	0.7	0.7	0.0	0.0
62.5°	1389.6	819.6	23.7	17.6	12.9	2.8	0.7	0.7	0.0	0.0	0.0
65°	1454.0	816.2	19.0	14.2	8.2	1.3	0.7	0.0	0.0	0.0	0.0
67.5°	1452.0	770.1	14.2	10.8	4.1	0.7	0.0	0.0	0.0	0.0	0.0
70°	1298.6	648.7	9.5	6.8	1.3	0.7	0.0	0.0	0.0	0.0	0.0
72.5°	921.4	415.9	6.1	4.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	405.7	126.2	3.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	79.4	29.2	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.0	3.4	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.7	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)