

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: P214952

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214952
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-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 2803 lumens
Efficiency: N/A
Efficacy: 90.4 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 (A_{in}): 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

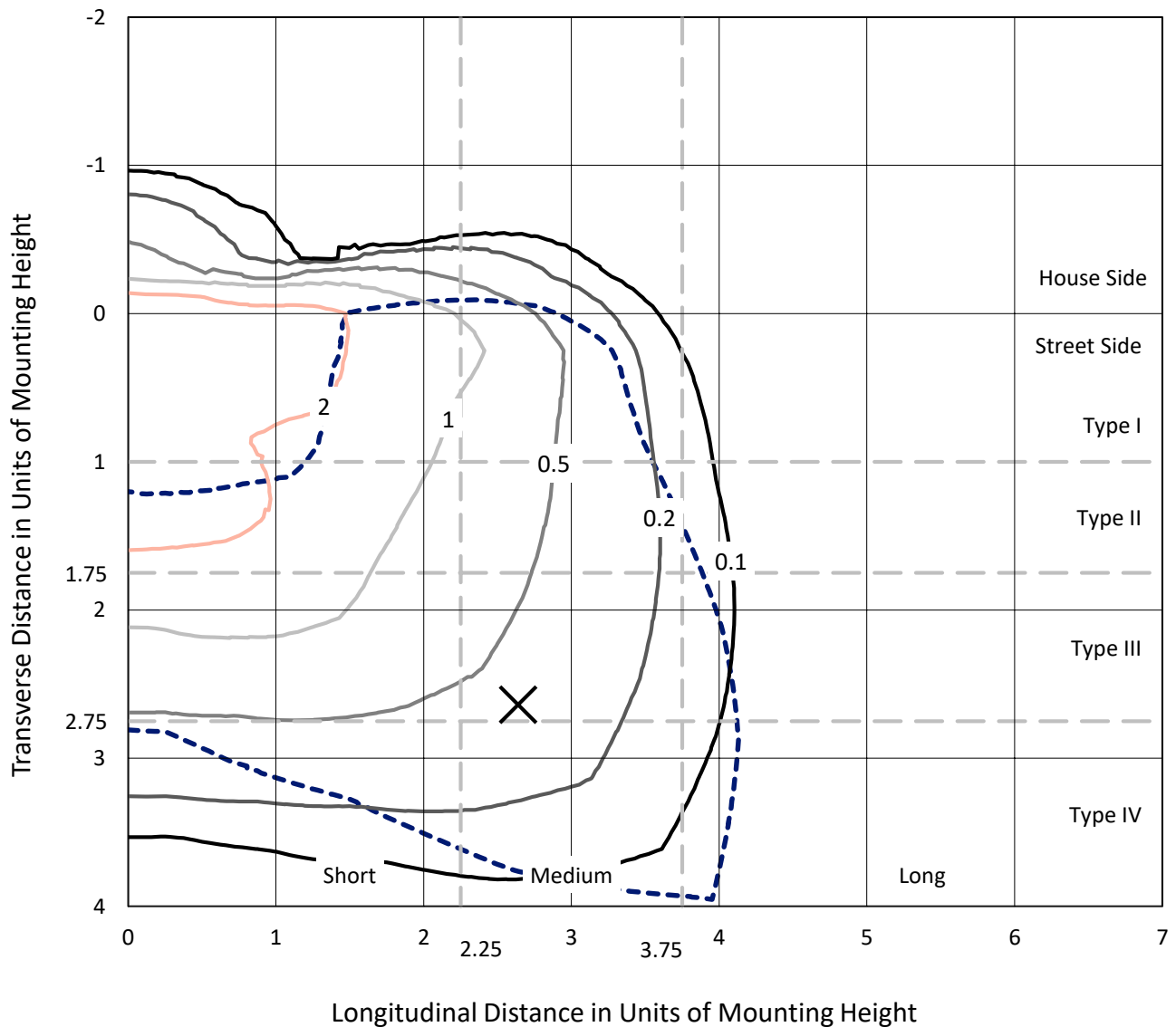


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

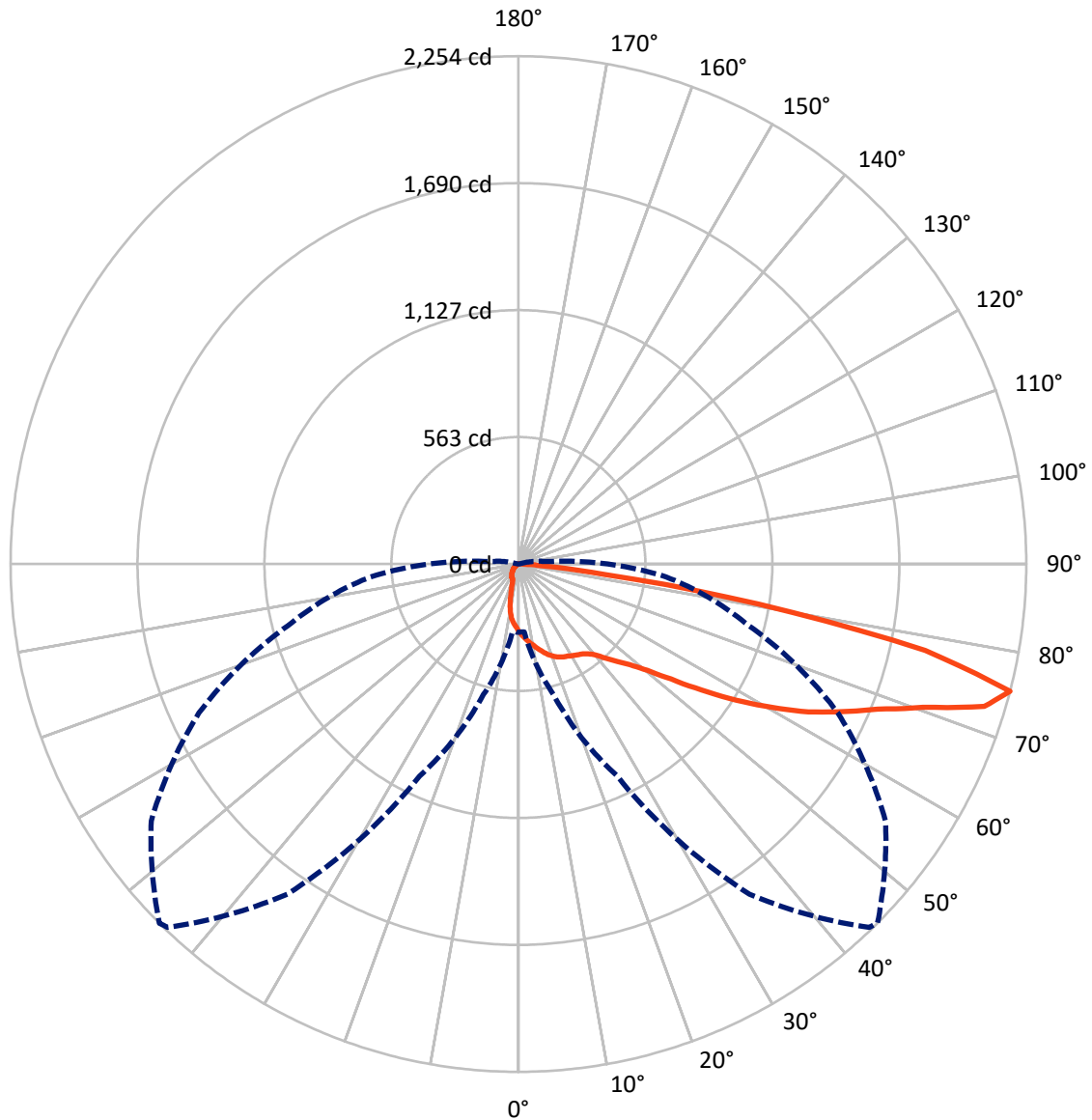


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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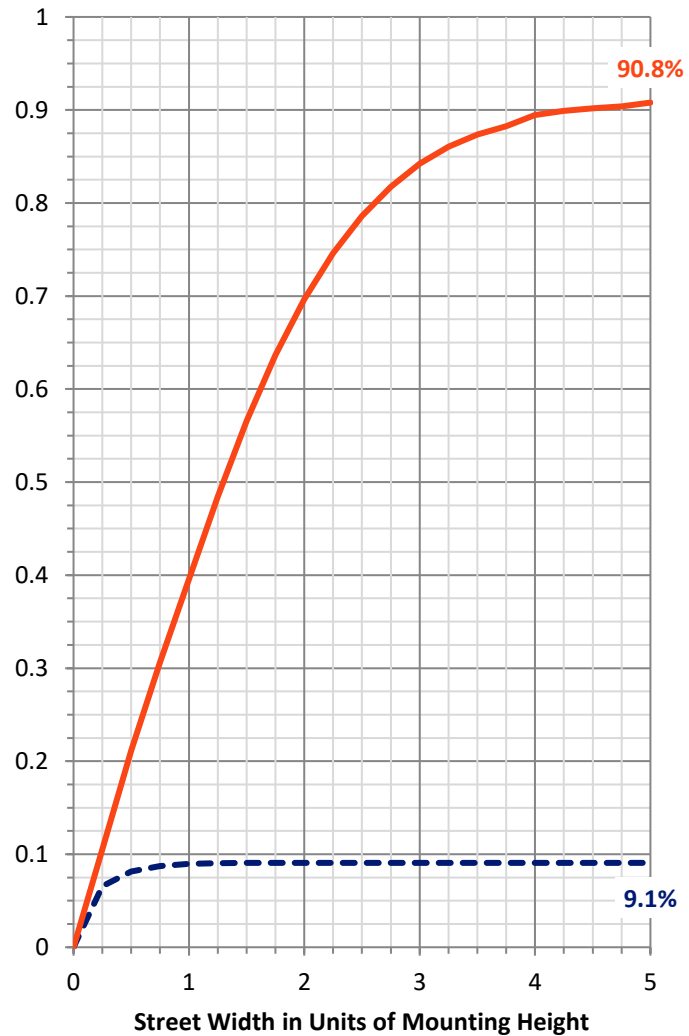
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	256.4	0.0	256.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2546.6	0.0	2546.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	2803.0	0.0	2803.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	1.0
10°-20°	80.2	2.9
20°-30°	132.8	4.7
30°-40°	192.1	6.9
40°-50°	314.6	11.2
50°-60°	560.5	20.0
60°-70°	824.1	29.4
70°-80°	621.7	22.2
80°-90°	48.8	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°	2803.0	100.0
0°-180°	2803.0	100.0



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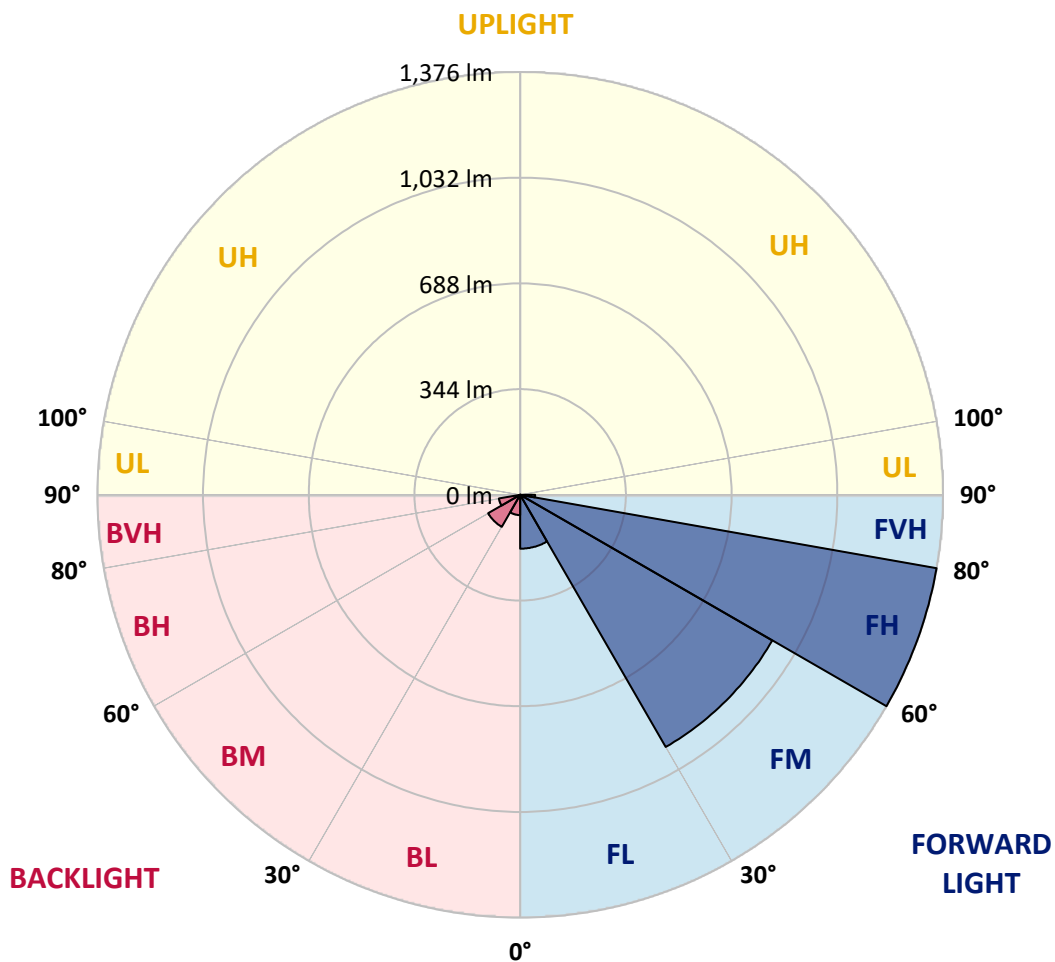
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	175.3	6.3			
FM	(30°-60°)	947.1	33.8			
FH	(60°-80°)	1375.5	49.1			G1/1800
FVH	(80°-90°)	48.6	1.7			G1/100
BL	(0°-30°)	65.9	2.4	B0/110		
BM	(30°-60°)	120.1	4.3	B0/220		
BH	(60°-80°)	70.2	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°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
2.5°	325.7	325.7	325.0	324.3	321.0	317.7	317.0	315.1	309.1	305.1	301.1
5°	352.9	353.5	352.2	348.9	341.6	334.3	333.6	328.3	317.0	309.1	300.5
7.5°	378.7	380.1	376.7	370.8	362.1	351.5	350.9	340.9	326.3	315.1	302.4
10°	400.6	400.6	396.0	388.7	379.4	368.1	366.8	355.5	338.9	325.0	308.4
12.5°	424.5	423.8	417.2	407.2	396.6	386.0	385.4	371.4	355.5	337.6	317.0
15°	446.4	445.1	436.4	427.1	415.9	404.6	403.9	390.0	373.4	352.2	329.6
17.5°	458.3	457.7	449.7	440.4	431.1	422.5	421.8	407.2	389.3	367.4	342.2
20°	460.3	461.0	454.3	446.4	441.1	436.4	436.4	423.2	403.9	380.7	355.5
22.5°	461.0	463.0	458.3	447.7	446.4	447.0	448.4	437.8	417.9	396.0	369.4
25°	465.6	468.3	464.9	452.3	451.0	455.7	457.0	452.3	434.4	412.6	385.4
27.5°	474.9	477.6	474.9	459.0	457.0	461.6	463.0	465.6	452.3	428.5	401.9
30°	493.5	494.1	488.2	468.3	464.3	470.3	472.2	479.5	468.9	443.7	417.9
32.5°	526.0	519.3	501.4	474.9	471.6	478.2	480.2	488.2	484.2	458.3	434.4
35°	592.3	557.8	516.7	484.2	480.9	487.5	490.2	501.4	503.4	478.9	455.0
37.5°	591.6	560.5	552.5	502.1	497.4	502.1	505.4	519.3	527.3	506.1	484.8
40°	633.4	620.2	620.2	535.9	520.7	527.3	530.6	544.5	558.5	541.9	520.0
42.5°	764.7	756.1	746.8	600.9	553.2	571.7	573.7	582.3	598.9	593.6	567.8
45°	911.3	903.4	867.6	711.0	608.9	612.2	616.8	630.8	654.6	664.6	634.1
47.5°	1026.1	1018.1	987.6	843.7	695.8	666.6	666.6	693.8	730.9	756.1	726.9
50°	1118.3	1109.0	1090.4	984.9	838.4	744.8	740.9	772.7	827.8	866.9	847.0
52.5°	1207.8	1180.6	1169.3	1130.9	999.5	858.3	847.7	870.2	946.5	994.9	978.3
55°	1267.5	1263.5	1251.6	1264.8	1168.7	996.2	986.9	991.6	1087.1	1119.6	1099.0
57.5°	1323.2	1322.6	1349.1	1410.8	1353.1	1154.1	1139.5	1132.2	1223.1	1215.1	1233.0
60°	1392.2	1380.3	1441.9	1530.2	1522.2	1308.0	1291.4	1276.8	1327.2	1304.6	1393.5
62.5°	1395.5	1392.2	1517.6	1644.2	1690.0	1464.5	1445.3	1392.9	1418.1	1392.2	1546.7
65°	1268.8	1285.4	1549.4	1704.6	1830.6	1601.8	1578.6	1497.0	1499.0	1481.7	1727.1
67.5°	1240.3	1248.9	1461.8	1769.6	1932.1	1740.4	1718.5	1617.0	1593.2	1594.5	1833.9
70°	1169.3	1182.6	1353.1	1764.9	2012.3	1925.5	1903.6	1793.5	1735.8	1671.4	1751.7
72.5°	893.4	916.0	1140.2	1547.4	1990.5	2167.6	2161.6	2017.0	1792.8	1534.8	1325.2
75°	302.4	301.8	598.9	1039.3	1788.2	2241.8	2253.8	1989.1	1564.0	1058.6	658.0
77.5°	65.0	65.7	123.4	421.2	1187.9	1800.1	1845.9	1500.3	1008.8	471.6	150.6
80°	31.8	32.5	51.1	111.4	474.9	1009.5	1081.1	771.4	372.8	94.2	25.2
82.5°	15.9	16.6	26.5	59.0	175.8	358.8	383.4	283.9	106.8	53.1	12.6
85°	6.0	6.0	13.3	35.2	80.3	84.2	103.5	82.2	64.3	43.1	3.3
87.5°	1.3	1.3	7.3	17.2	35.8	26.5	26.5	25.2	39.1	29.2	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°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
2.5°	299.1	296.5	291.8	287.2	283.9	279.9	277.9	275.9	275.3	274.6	275.9
5°	295.8	291.8	283.2	275.9	269.3	264.0	260.0	256.0	254.0	252.7	253.4
7.5°	295.8	289.8	277.2	266.0	255.4	244.1	232.8	224.2	217.6	213.6	214.2
10°	299.1	291.2	274.6	259.3	239.4	215.6	191.0	172.4	159.8	152.6	152.6
12.5°	306.4	295.8	275.3	251.4	217.6	175.8	138.6	116.1	106.8	101.5	102.1
15°	316.4	303.8	278.6	240.8	187.0	130.7	96.8	82.2	82.2	83.6	84.2
17.5°	327.7	313.7	281.2	224.8	147.9	93.5	76.3	74.9	76.9	80.3	80.3
20°	338.9	323.7	282.6	199.6	110.8	74.3	72.3	72.3	73.6	76.9	77.6
22.5°	352.9	336.3	281.2	168.5	82.9	70.3	69.6	69.6	69.6	73.6	73.6
25°	367.4	350.9	275.9	135.3	70.3	67.7	67.0	66.3	66.3	69.6	70.3
27.5°	384.0	366.1	263.3	103.5	66.3	65.0	64.3	63.0	63.0	65.7	65.7
30°	400.6	383.4	244.1	78.3	63.0	62.3	61.0	59.7	58.4	61.0	61.0
32.5°	418.5	401.3	218.9	62.3	58.4	58.4	57.7	55.7	54.4	55.7	56.4
35°	442.4	421.8	190.4	54.4	52.4	52.4	52.4	51.7	49.1	50.4	50.4
37.5°	474.2	450.4	157.2	50.4	47.8	46.4	46.4	46.4	44.4	45.1	45.1
40°	514.7	483.5	125.4	47.1	44.4	41.1	39.8	40.5	39.1	39.1	38.5
42.5°	569.7	519.3	94.2	44.4	41.8	37.1	34.5	33.8	32.5	31.8	31.8
45°	648.7	563.1	67.7	41.8	39.8	32.5	29.8	27.9	24.5	22.6	22.6
47.5°	750.8	612.9	50.4	39.1	37.8	28.5	25.2	21.2	16.6	15.3	15.3
50°	875.5	668.6	42.4	35.2	34.5	25.2	19.9	13.9	9.3	8.0	8.6
52.5°	996.9	721.0	37.8	31.2	30.5	21.9	14.6	7.3	4.0	4.0	4.0
55°	1099.0	758.1	34.5	27.9	26.5	17.2	8.0	3.3	2.0	2.0	2.0
57.5°	1191.2	779.3	31.2	24.5	21.2	11.9	3.3	1.3	1.3	0.7	0.7
60°	1275.5	791.9	27.2	21.2	16.6	6.6	1.3	0.7	0.7	0.0	0.0
62.5°	1358.4	801.2	23.2	17.2	12.6	2.7	0.7	0.7	0.0	0.0	0.0
65°	1421.4	797.9	18.6	13.9	8.0	1.3	0.7	0.0	0.0	0.0	0.0
67.5°	1419.4	752.8	13.9	10.6	4.0	0.7	0.0	0.0	0.0	0.0	0.0
70°	1269.5	634.1	9.3	6.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0
72.5°	900.7	406.6	6.0	4.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	396.6	123.4	3.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	77.6	28.5	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.6	3.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.0	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)