

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: P265915

Luminaire Tested: **ARCH-AF24-20-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
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-T2R-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1913.9 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G0

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

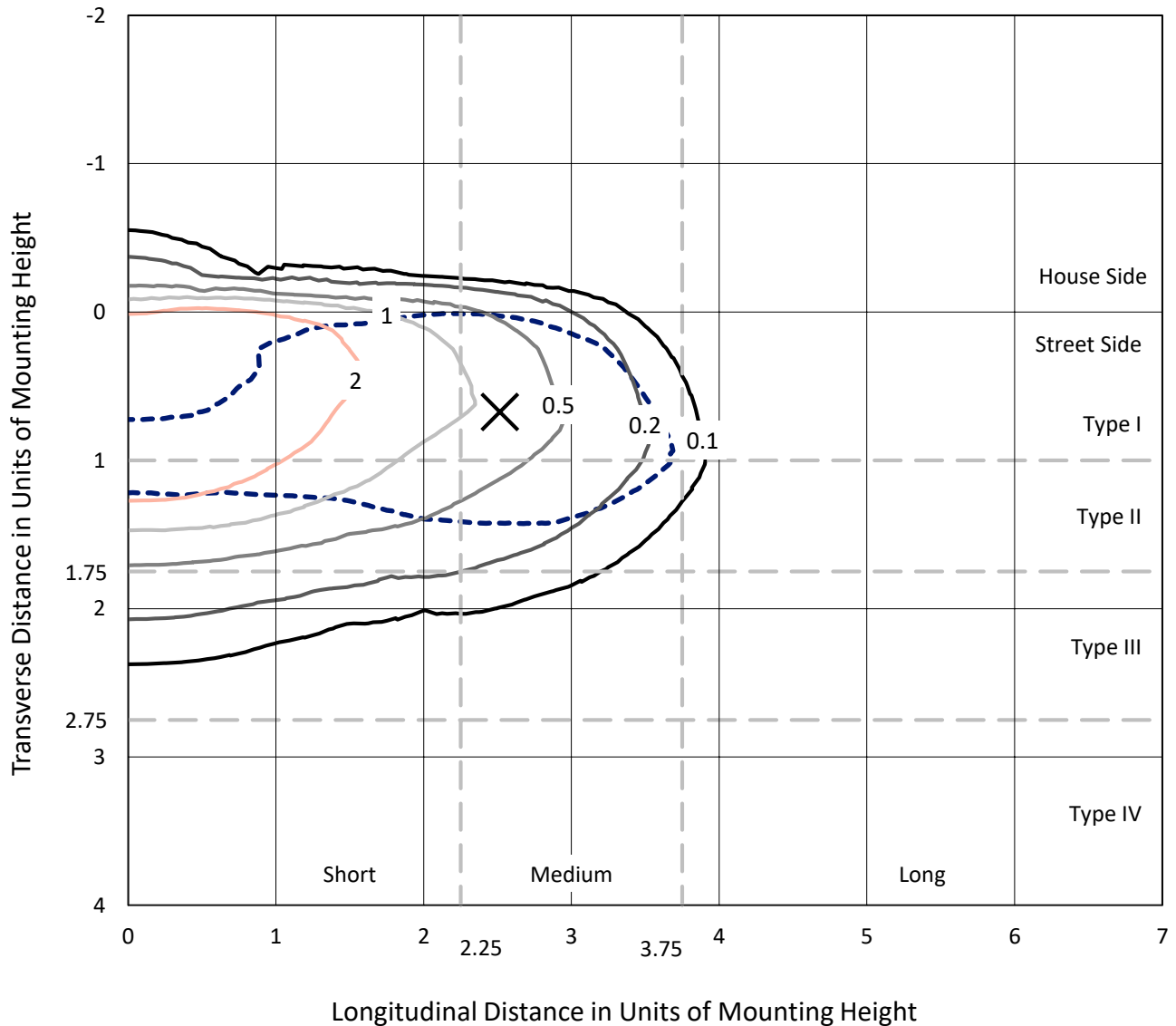


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Iso-Footcandle Lines of Horizontal Illumination

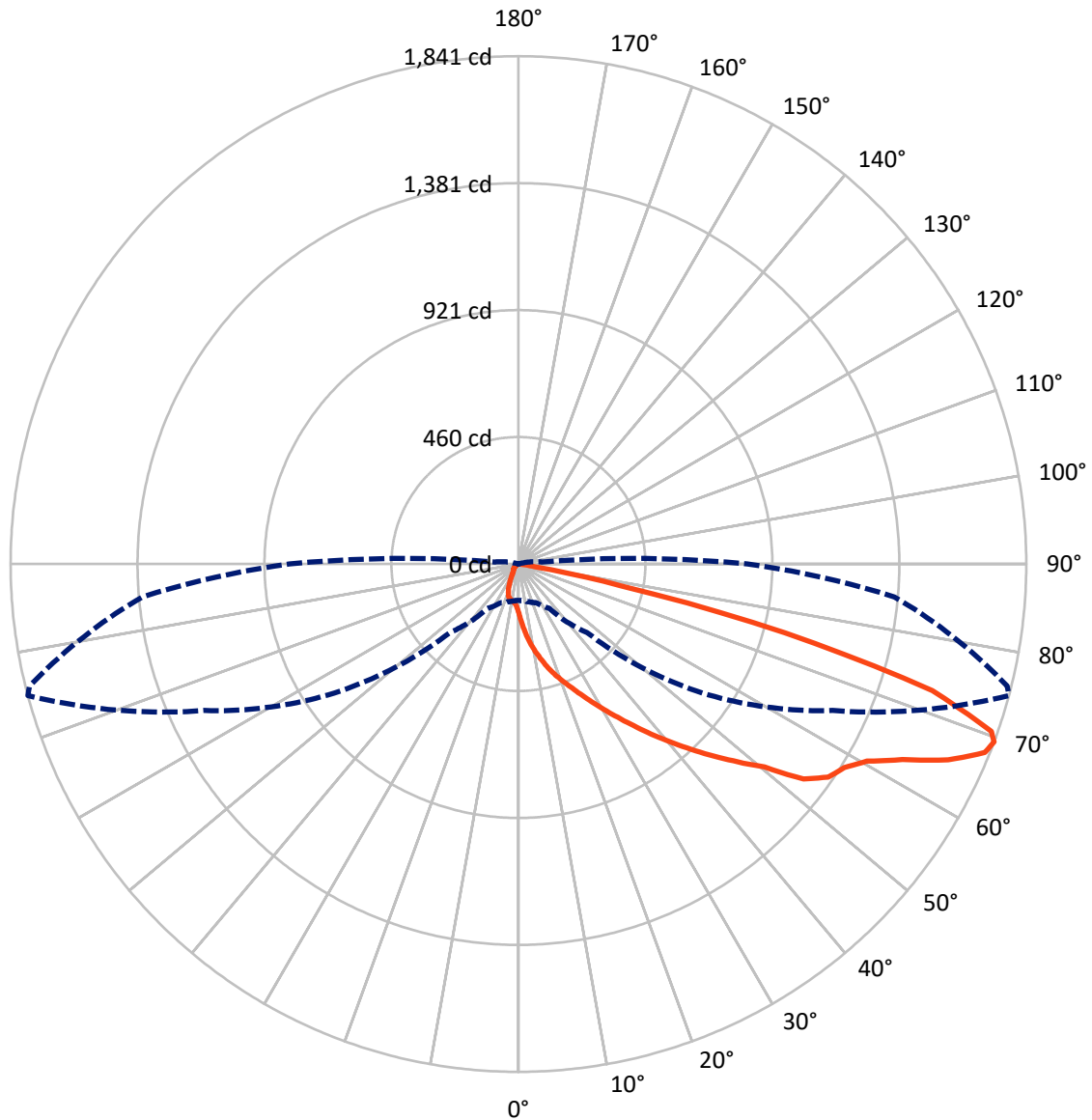
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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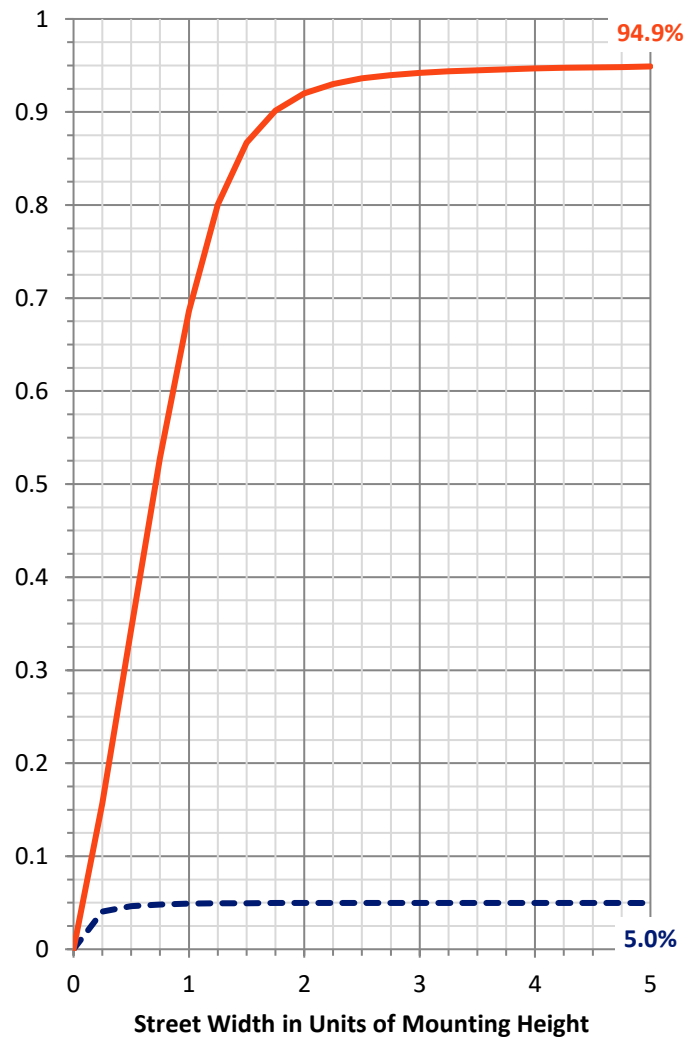
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	95.5	0.0	95.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	1818.4	0.0	1818.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	1913.9	0.0	1913.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.8	1.1
10°-20°	74.2	3.9
20°-30°	141.7	7.4
30°-40°	254.2	13.3
40°-50°	389.5	20.4
50°-60°	452.7	23.7
60°-70°	400.9	20.9
70°-80°	172.9	9.0
80°-90°	6.9	0.4
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°	1913.9	100.0
0°-180°	1913.9	100.0

Coefficient of Utilization



--- HS — SS

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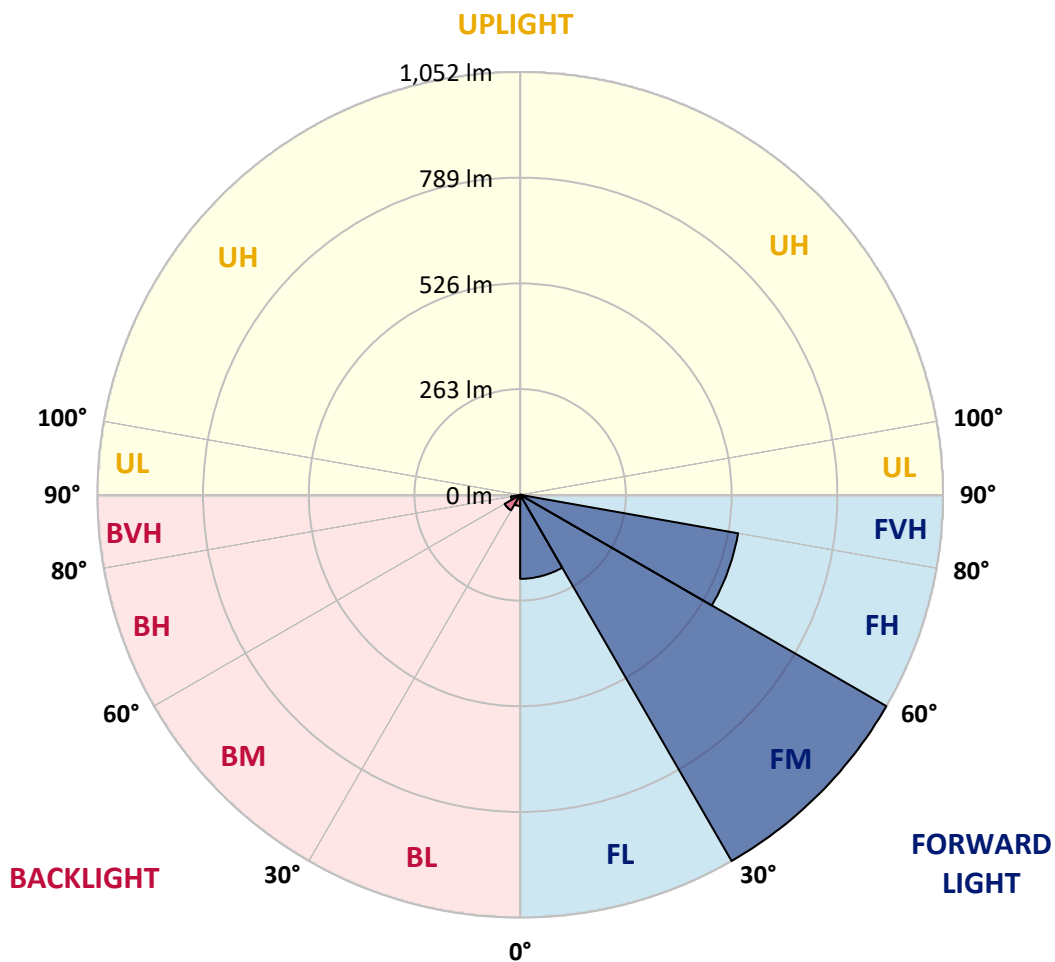
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.0	10.9			
FM	(30°-60°)	1051.9	55.0			
FH	(60°-80°)	550.6	28.8			G0/660
FVH	(80°-90°)	6.8	0.4			G0/10
BL	(0°-30°)	27.7	1.4	B0/110		
BM	(30°-60°)	44.5	2.3	B0/220		
BH	(60°-80°)	23.1	1.2	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-G0

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0
2.5°	293.3	290.5	287.5	284.3	276.9	264.0	247.9	230.5	209.0	205.4	188.0
5°	356.2	354.9	352.0	347.6	339.2	325.1	307.0	281.3	245.4	239.3	202.5
7.5°	400.4	399.6	397.1	391.8	384.2	370.2	351.1	323.5	281.8	274.8	220.7
10°	440.1	439.6	437.6	432.7	425.2	409.8	389.7	360.7	316.6	308.7	241.7
12.5°	476.0	476.5	475.7	473.0	467.7	453.3	430.2	398.8	350.0	341.3	266.9
15°	497.1	498.3	501.7	506.6	508.3	496.7	472.7	438.0	384.2	376.7	295.8
17.5°	490.0	491.4	501.7	518.5	534.8	536.3	514.9	475.2	418.2	410.7	324.4
20°	473.0	474.8	485.5	508.6	540.1	561.9	553.3	515.6	450.4	441.2	351.6
22.5°	492.1	492.1	495.4	509.5	537.9	572.3	583.9	556.2	483.5	472.2	378.8
25°	557.4	556.2	549.1	543.4	552.5	583.0	607.0	597.6	522.3	509.5	407.8
27.5°	640.0	645.8	632.5	611.6	590.8	604.1	627.6	638.3	565.3	552.0	437.6
30°	732.6	735.1	719.4	691.2	655.0	642.1	652.0	673.5	611.9	597.6	468.6
32.5°	816.1	814.0	800.7	771.5	726.4	698.7	683.4	701.5	662.8	646.2	500.4
35°	890.0	891.7	875.6	841.7	797.4	768.1	731.8	733.5	719.8	700.8	537.1
37.5°	956.5	953.6	938.4	904.5	864.3	832.5	794.1	766.4	782.2	762.3	578.5
40°	1010.7	1007.8	991.6	958.6	921.0	895.0	864.8	810.7	847.9	825.2	622.6
42.5°	1053.6	1050.4	1036.7	1004.8	968.6	945.3	931.0	865.2	918.1	895.4	672.3
45°	1074.7	1071.8	1063.6	1039.6	1007.8	987.5	994.6	927.9	993.3	974.3	726.8
47.5°	1049.8	1048.7	1058.3	1054.0	1035.8	1025.1	1049.5	996.6	1072.2	1053.6	789.6
50°	974.8	976.7	1004.5	1038.8	1047.5	1060.3	1094.6	1069.0	1156.9	1137.2	862.0
52.5°	789.3	803.3	886.6	969.4	1033.4	1081.7	1147.5	1172.2	1294.9	1275.6	974.8
55°	589.2	594.9	685.9	827.2	976.7	1080.1	1186.8	1233.0	1363.1	1343.2	1004.5
57.5°	467.3	469.4	514.4	658.6	860.2	1042.9	1207.3	1254.8	1392.9	1376.4	1048.7
60°	366.9	369.5	402.0	501.3	696.2	942.5	1177.6	1273.8	1451.1	1437.8	1125.9
62.5°	285.5	287.9	307.8	366.1	522.3	788.0	1117.8	1304.5	1561.9	1555.7	1252.3
65°	221.1	221.9	235.5	262.8	368.9	620.5	1044.5	1332.9	1711.5	1706.2	1354.9
67.5°	163.2	164.5	173.9	190.9	249.2	445.7	924.7	1311.0	1824.3	1808.6	1392.1
69°	131.8	133.0	141.4	155.0	196.6	351.1	815.2	1257.0	1841.2	1826.3	1368.5
70°	112.7	113.6	121.9	133.5	167.8	298.3	728.4	1210.2	1818.9	1804.4	1314.8
72.5°	72.4	76.4	84.7	92.2	111.1	197.4	491.7	1003.6	1569.2	1544.5	1029.6
75°	40.1	41.3	56.2	65.2	74.0	128.5	273.5	625.9	998.2	980.9	550.8
77.5°	33.1	33.9	39.6	49.5	49.5	72.0	103.2	246.7	379.8	342.6	149.2
80°	23.1	24.0	30.2	32.7	35.6	40.6	33.4	54.1	58.7	52.0	22.3
82.5°	16.1	17.0	20.7	26.9	28.4	19.0	12.3	16.1	17.0	17.0	8.7
85°	2.9	4.1	15.4	22.3	17.0	5.7	7.0	5.7	5.4	5.7	2.1
87.5°	0.0	0.0	9.5	10.7	9.2	2.4	2.9	2.1	1.3	1.6	0.8
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°	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0	178.0
2.5°	179.3	170.7	155.8	145.0	136.0	128.8	126.0	121.5	118.1	119.8	117.8
5°	184.3	169.1	145.0	129.7	118.9	110.0	102.4	96.7	92.2	91.3	90.5
7.5°	192.1	170.1	138.9	119.8	103.8	89.7	78.2	69.3	62.8	62.8	60.4
10°	202.8	173.6	135.1	110.0	86.0	67.0	55.3	47.2	43.7	43.4	42.6
12.5°	217.7	179.8	132.2	97.0	67.0	48.8	41.7	38.8	37.5	37.2	36.8
15°	238.1	188.9	128.8	81.3	50.8	40.1	37.2	34.8	33.4	33.1	32.7
17.5°	257.5	197.1	121.9	65.2	41.3	36.3	33.1	31.0	29.4	28.9	28.9
20°	275.6	204.2	110.0	50.8	37.2	32.7	29.4	26.9	25.2	24.9	24.9
22.5°	294.6	209.9	95.0	41.3	33.9	28.9	25.6	23.1	21.5	21.1	20.7
25°	314.9	214.1	78.2	36.8	30.6	25.6	21.9	19.9	18.5	18.1	17.7
27.5°	336.8	215.8	62.0	33.4	26.9	22.3	19.0	17.0	16.1	15.7	15.7
30°	356.5	214.1	47.9	29.7	23.5	19.5	16.4	14.9	14.1	13.7	13.7
32.5°	377.3	209.9	38.4	26.4	20.7	16.4	14.1	12.8	12.3	11.9	11.9
35°	399.1	204.5	33.1	23.5	17.7	14.5	12.3	11.6	11.1	10.7	10.7
37.5°	424.8	197.9	30.2	21.1	15.7	12.8	10.7	10.3	9.9	9.9	9.9
40°	453.6	189.6	28.0	19.0	14.1	11.1	9.5	9.2	8.7	8.7	8.7
42.5°	484.2	180.2	26.1	17.0	12.3	9.5	8.3	8.3	7.8	7.8	7.5
45°	518.5	170.7	24.0	14.9	10.7	8.3	7.0	6.6	6.6	6.2	6.2
47.5°	559.0	162.0	21.9	13.2	9.5	7.0	6.2	5.7	5.4	5.0	5.0
50°	616.1	161.2	19.5	11.6	8.7	5.7	5.0	4.5	4.1	3.8	3.8
52.5°	672.7	153.7	16.4	9.5	7.0	5.0	3.8	3.4	2.9	2.9	2.4
55°	685.4	141.4	14.5	8.3	5.4	3.8	2.9	2.1	2.1	1.6	1.6
57.5°	713.7	135.6	12.3	6.6	4.1	2.9	1.6	1.3	1.3	1.3	1.3
60°	768.9	133.8	10.7	5.7	2.9	2.1	1.3	0.8	0.8	0.4	0.4
62.5°	845.3	132.2	9.2	5.0	2.1	1.3	0.8	0.4	0.0	0.0	0.0
65°	887.5	121.1	7.5	3.8	1.6	1.3	0.4	0.0	0.0	0.0	0.0
67.5°	876.3	100.0	6.6	2.4	1.3	0.8	0.4	0.0	0.0	0.0	0.0
69°	829.7	84.4	5.4	2.1	1.3	0.8	0.4	0.0	0.0	0.0	0.0
70°	773.5	72.8	5.0	1.6	0.8	0.4	0.4	0.0	0.0	0.0	0.0
72.5°	549.1	38.0	3.4	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0
75°	256.6	17.0	2.1	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0
77.5°	56.7	7.8	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	10.7	2.9	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.8	1.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.0	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)