

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: P398019

Luminaire Tested: **ARCH-S-PA1-70-827-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398019
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 930mA 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: 5214 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

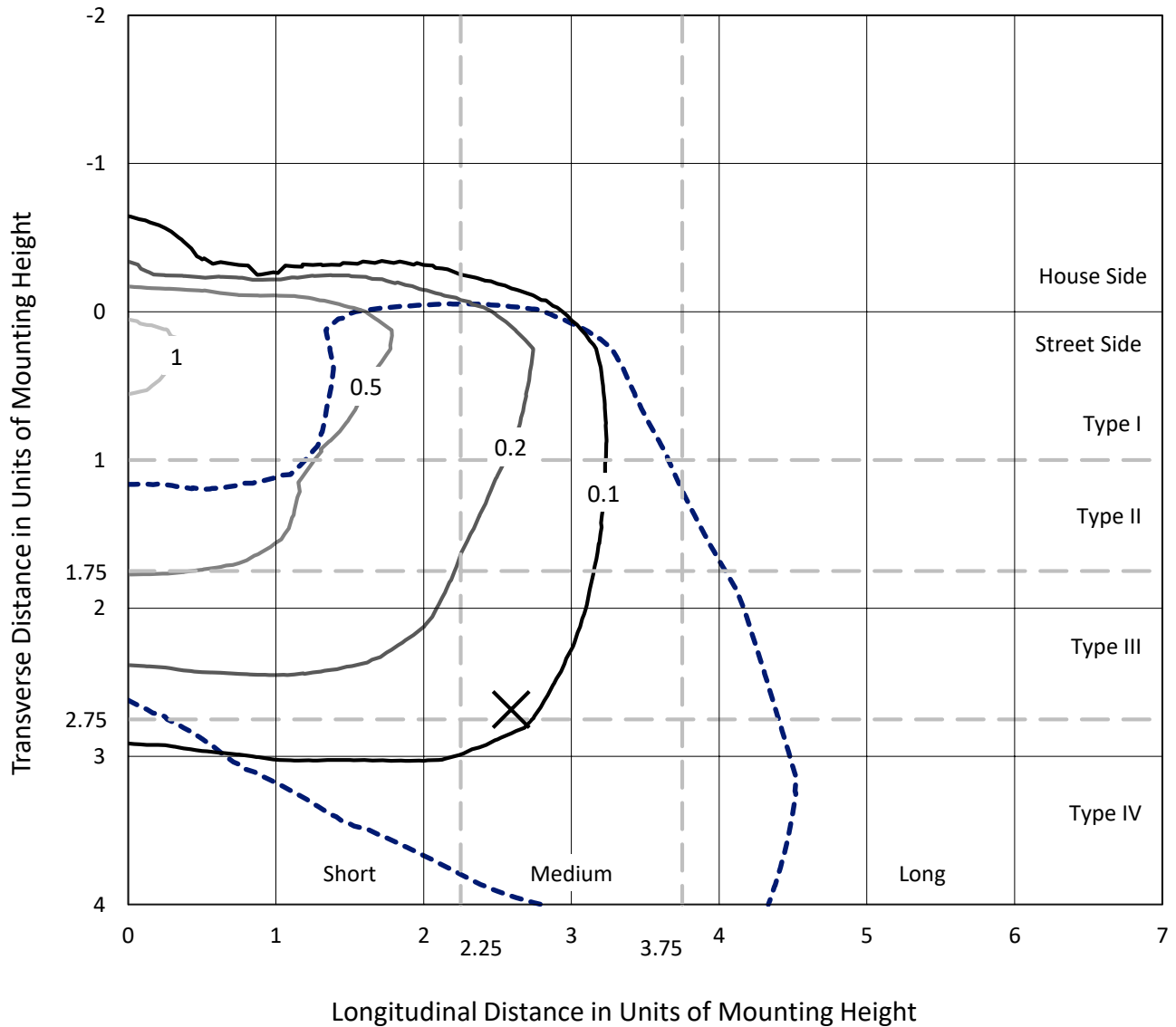
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

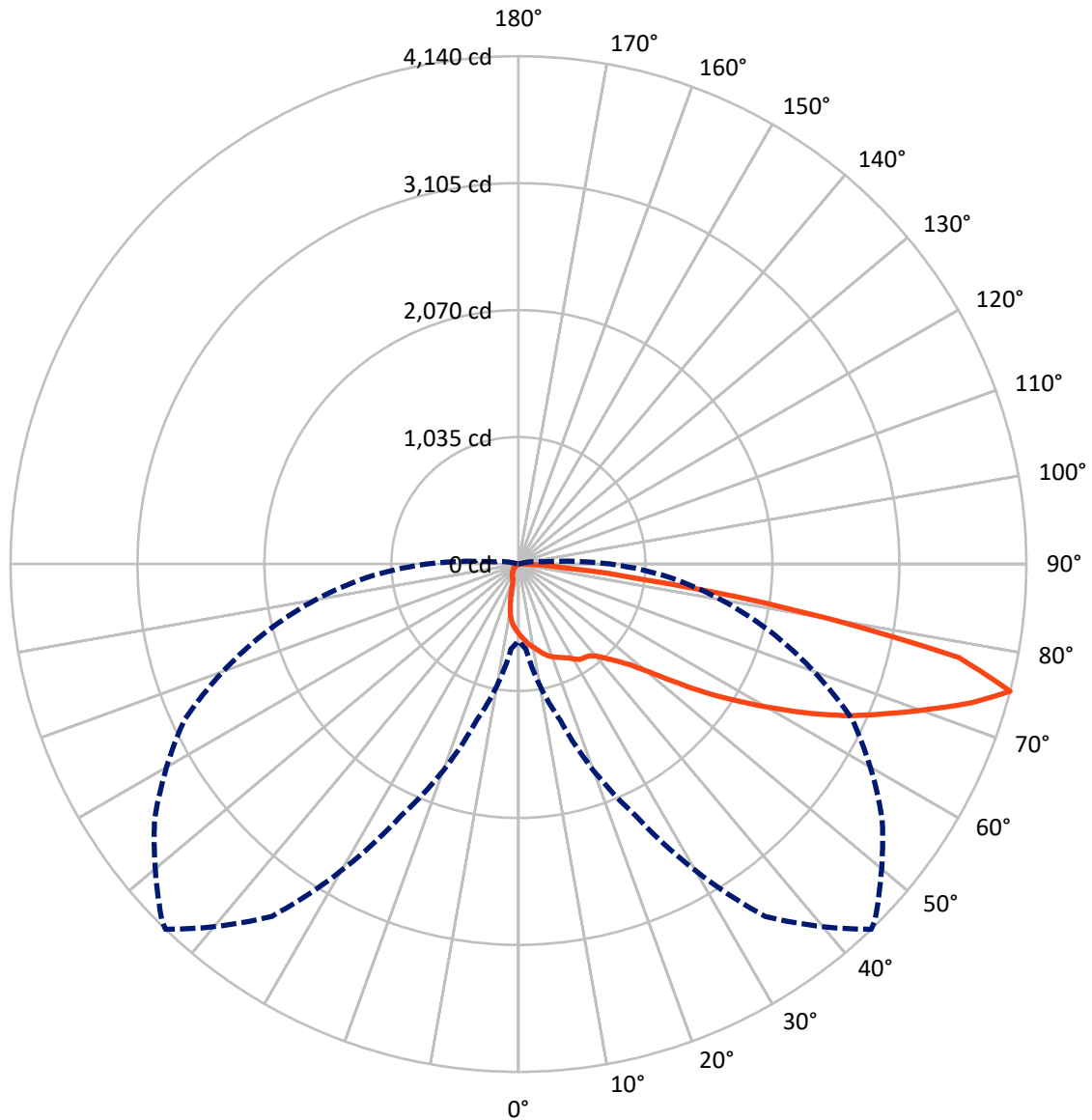


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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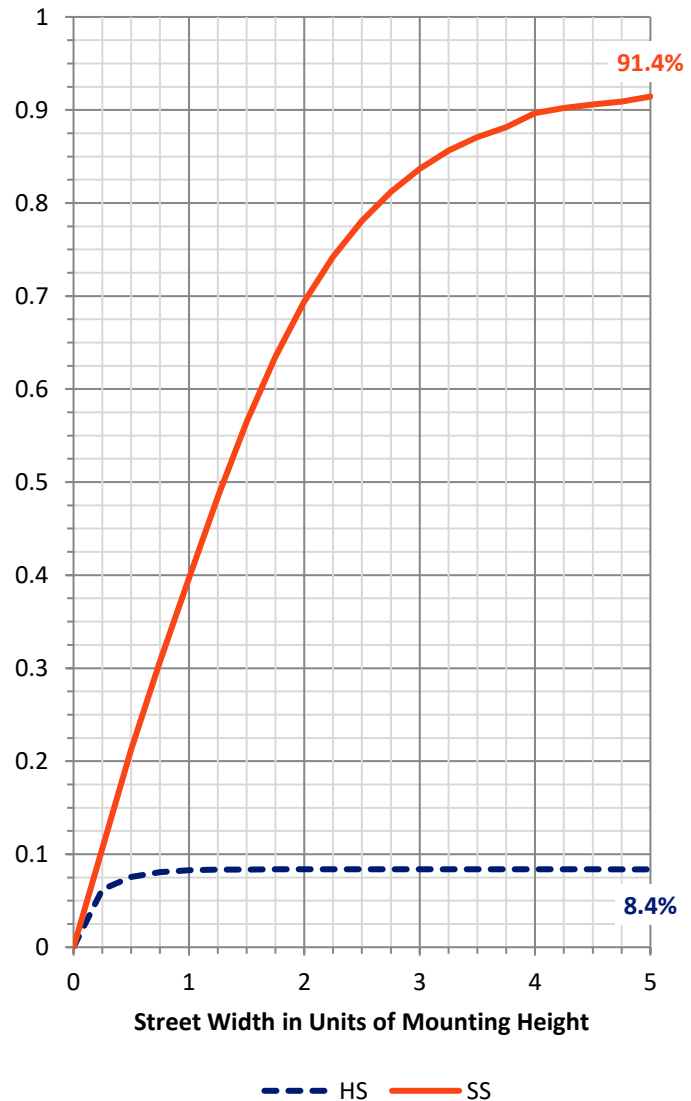
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	439.7	0.0	439.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4774.3	0.0	4774.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	5214.0	0.0	5214.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	1.0
10°-20°	150.0	2.9
20°-30°	247.5	4.7
30°-40°	359.2	6.9
40°-50°	583.9	11.2
50°-60°	1029.4	19.7
60°-70°	1479.5	28.4
70°-80°	1184.7	22.7
80°-90°	126.2	2.4
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°	5214.0	100.0
0°-180°	5214.0	100.0

Coefficient of Utilization



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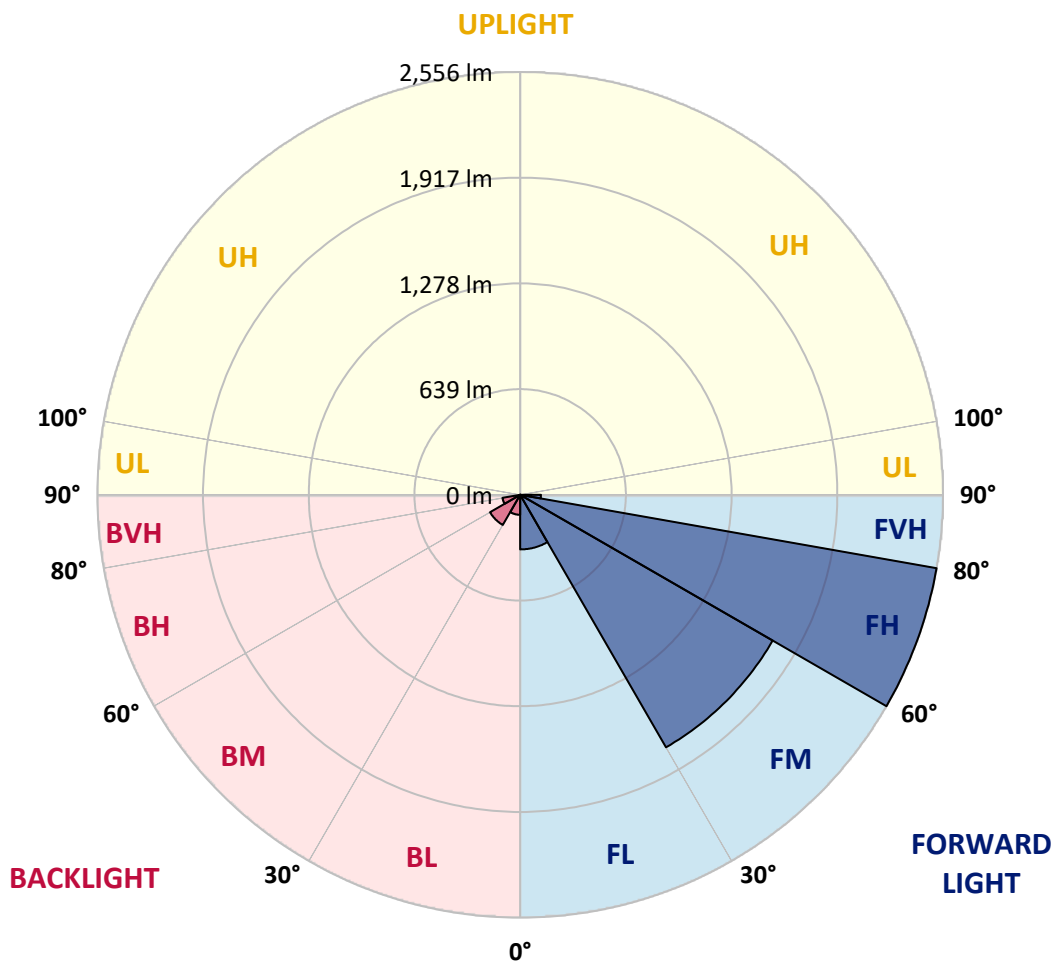
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	330.2	6.3			
FM	(30°-60°)	1762.4	33.8			
FH	(60°-80°)	2555.8	49.0			G2/5000
FVH	(80°-90°)	125.9	2.4			G2/225
BL	(0°-30°)	120.8	2.3	B1/500		
BM	(30°-60°)	210.2	4.0	B0/220		
BH	(60°-80°)	108.4	2.1	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5
2.5°	618.5	617.5	614.7	609.8	605.0	600.2	599.3	591.6	582.9	576.2	570.4
5°	673.3	672.4	667.6	657.0	646.4	633.9	632.9	614.7	598.3	580.0	564.6
7.5°	730.1	728.2	719.5	703.2	684.9	665.6	663.7	636.8	612.7	588.7	566.6
10°	774.3	772.4	759.9	740.7	715.7	691.6	688.7	660.8	636.8	606.0	576.2
12.5°	817.6	813.8	797.4	776.3	745.5	722.4	719.5	690.6	661.8	630.0	593.5
15°	858.0	853.2	837.8	810.9	778.2	756.1	754.1	723.4	693.5	657.0	616.6
17.5°	885.9	884.0	865.7	835.9	804.2	785.9	784.0	752.2	722.4	683.9	640.6
20°	900.3	900.3	883.0	850.3	821.5	809.0	806.1	776.3	747.4	710.8	665.6
22.5°	903.2	906.1	892.6	857.1	835.9	825.3	823.4	797.4	769.5	735.9	693.5
25°	909.0	909.0	902.3	863.8	848.4	845.5	844.6	821.5	796.5	762.8	721.4
27.5°	915.7	915.7	910.9	873.4	867.6	866.7	865.7	855.1	834.9	795.5	754.1
30°	933.0	934.0	930.2	892.6	888.8	899.4	901.3	895.5	870.5	821.5	787.8
32.5°	976.3	967.7	957.1	906.1	912.8	926.3	927.3	915.7	888.8	849.4	828.2
35°	1085.0	1034.0	986.0	917.7	920.5	934.0	935.9	935.0	918.6	885.0	874.4
37.5°	1186.0	1113.9	1045.6	944.6	935.0	949.4	953.2	969.6	957.1	934.0	936.9
40°	1244.7	1216.8	1168.7	1018.7	963.8	986.0	989.8	1014.8	1010.0	1000.4	1018.7
42.5°	1425.5	1427.5	1375.5	1129.3	1016.7	1052.3	1057.1	1077.3	1084.1	1088.9	1133.1
45°	1635.2	1642.0	1629.5	1328.4	1116.8	1128.3	1135.0	1162.0	1187.0	1217.8	1298.6
47.5°	1887.3	1881.5	1835.3	1571.8	1290.9	1226.4	1231.2	1283.2	1326.5	1393.8	1509.2
50°	2110.4	2124.8	2037.3	1798.8	1536.2	1381.3	1376.5	1427.5	1505.4	1599.6	1744.9
52.5°	2335.5	2314.3	2196.0	2023.8	1826.7	1592.0	1577.5	1605.4	1715.1	1826.7	1975.8
55°	2395.1	2397.1	2356.7	2270.1	2069.1	1847.8	1823.8	1821.8	1958.4	2034.4	2218.2
57.5°	2512.5	2517.3	2526.9	2544.2	2449.0	2103.7	2078.7	2051.7	2184.5	2228.7	2461.5
60°	2631.8	2637.5	2696.2	2789.5	2726.0	2379.8	2352.8	2289.3	2363.4	2423.0	2717.4
62.5°	2616.4	2656.8	2827.0	3012.7	3005.0	2682.8	2649.1	2496.1	2543.3	2595.2	2952.1
65°	2362.4	2405.7	2788.6	3074.2	3284.9	2981.9	2927.1	2709.7	2712.6	2775.1	3178.1
67.5°	2135.4	2182.6	2548.1	3048.3	3469.6	3250.3	3193.5	2924.2	2879.0	2982.9	3299.3
70°	2004.6	2051.7	2356.7	2967.5	3521.5	3547.5	3498.4	3169.5	3077.1	3172.4	3163.7
72.5°	1568.9	1642.9	2112.3	2813.6	3577.3	3865.9	3827.4	3480.2	3245.5	2974.2	2408.6
75°	625.2	693.5	1318.8	2264.3	3507.1	4140.0	4110.2	3619.6	3004.0	2123.9	1233.2
77.5°	188.5	202.0	366.5	1119.7	2571.2	3670.6	3661.0	3043.5	2125.8	986.0	336.7
80°	62.5	69.3	112.5	308.8	1173.5	2293.2	2336.5	1939.2	965.8	226.0	68.3
82.5°	26.0	28.9	56.8	124.1	415.5	987.9	973.4	868.6	336.7	140.4	25.0
85°	6.7	8.7	26.0	71.2	152.0	340.5	357.8	291.5	190.5	116.4	7.7
87.5°	0.0	0.0	12.5	28.9	68.3	102.9	107.7	88.5	107.7	87.5	3.8
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°	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5	567.5
2.5°	565.6	560.8	552.1	546.4	538.7	536.7	532.9	528.1	527.1	522.3	523.3
5°	556.0	548.3	532.9	522.3	509.8	506.0	499.2	494.4	490.6	483.8	484.8
7.5°	554.1	542.5	521.4	501.2	481.0	466.5	446.3	430.0	416.5	402.1	405.0
10°	560.8	546.4	516.5	488.6	452.1	405.9	353.0	318.4	301.1	283.8	285.7
12.5°	574.3	556.9	518.5	476.1	402.1	323.2	250.1	203.0	190.5	182.8	183.7
15°	594.5	573.3	524.2	452.1	334.7	233.7	166.4	146.2	151.0	153.9	153.9
17.5°	615.6	591.6	529.0	408.8	258.8	163.5	135.6	133.7	140.4	147.2	147.2
20°	641.6	610.8	530.0	354.0	186.6	132.7	127.9	127.9	132.7	140.4	140.4
22.5°	666.6	632.0	521.4	291.5	142.4	123.1	123.1	123.1	126.0	133.7	134.7
25°	696.4	657.9	503.1	225.1	122.2	117.4	117.4	118.3	120.2	127.0	127.9
27.5°	728.2	684.9	472.3	164.5	111.6	110.6	111.6	112.5	113.5	120.2	122.2
30°	764.7	714.7	432.9	123.1	102.0	102.0	104.8	106.8	106.8	112.5	114.5
32.5°	807.0	754.1	385.7	102.0	92.3	91.4	96.2	99.1	99.1	103.9	105.8
35°	859.9	794.5	329.0	90.4	84.6	82.7	84.6	89.5	91.4	95.2	96.2
37.5°	930.2	842.6	268.4	83.7	78.9	75.0	75.0	76.0	79.8	83.7	84.6
40°	1019.6	895.5	208.7	78.9	73.1	69.3	66.4	65.4	64.4	67.3	69.3
42.5°	1132.2	955.2	155.8	74.1	68.3	62.5	58.7	54.8	50.0	49.1	50.0
45°	1276.4	1028.3	115.4	70.2	65.4	56.8	50.0	43.3	34.6	31.7	32.7
47.5°	1446.7	1104.3	90.4	66.4	63.5	50.0	41.4	29.8	21.2	19.2	20.2
50°	1627.5	1177.4	77.0	61.6	59.6	43.3	29.8	18.3	12.5	12.5	13.5
52.5°	1781.4	1218.7	70.2	57.7	53.9	35.6	19.2	10.6	7.7	7.7	8.7
55°	1930.5	1240.9	65.4	53.9	46.2	25.0	10.6	6.7	4.8	4.8	4.8
57.5°	2084.4	1250.5	59.6	49.1	36.6	15.4	5.8	3.8	2.9	2.9	2.9
60°	2221.0	1232.2	51.0	40.4	24.0	7.7	2.9	2.9	1.9	1.0	1.0
62.5°	2335.5	1197.6	35.6	28.9	14.4	3.8	1.9	1.0	0.0	0.0	0.0
65°	2405.7	1141.8	23.1	19.2	8.7	2.9	1.0	0.0	0.0	0.0	0.0
67.5°	2385.5	1036.9	14.4	12.5	3.8	1.9	1.0	0.0	0.0	0.0	0.0
70°	2152.7	850.3	10.6	7.7	2.9	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1551.6	575.2	7.7	4.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	746.4	204.9	4.8	3.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	182.8	45.2	2.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	40.4	8.7	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.5	3.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.0	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)