

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: P214929

Luminaire Tested: **ARCH-AF24-80-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214929
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-AF24-80-D-U-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1050mA 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: 5710 lumens
Efficiency: N/A
Efficacy: 68.8 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): 83
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

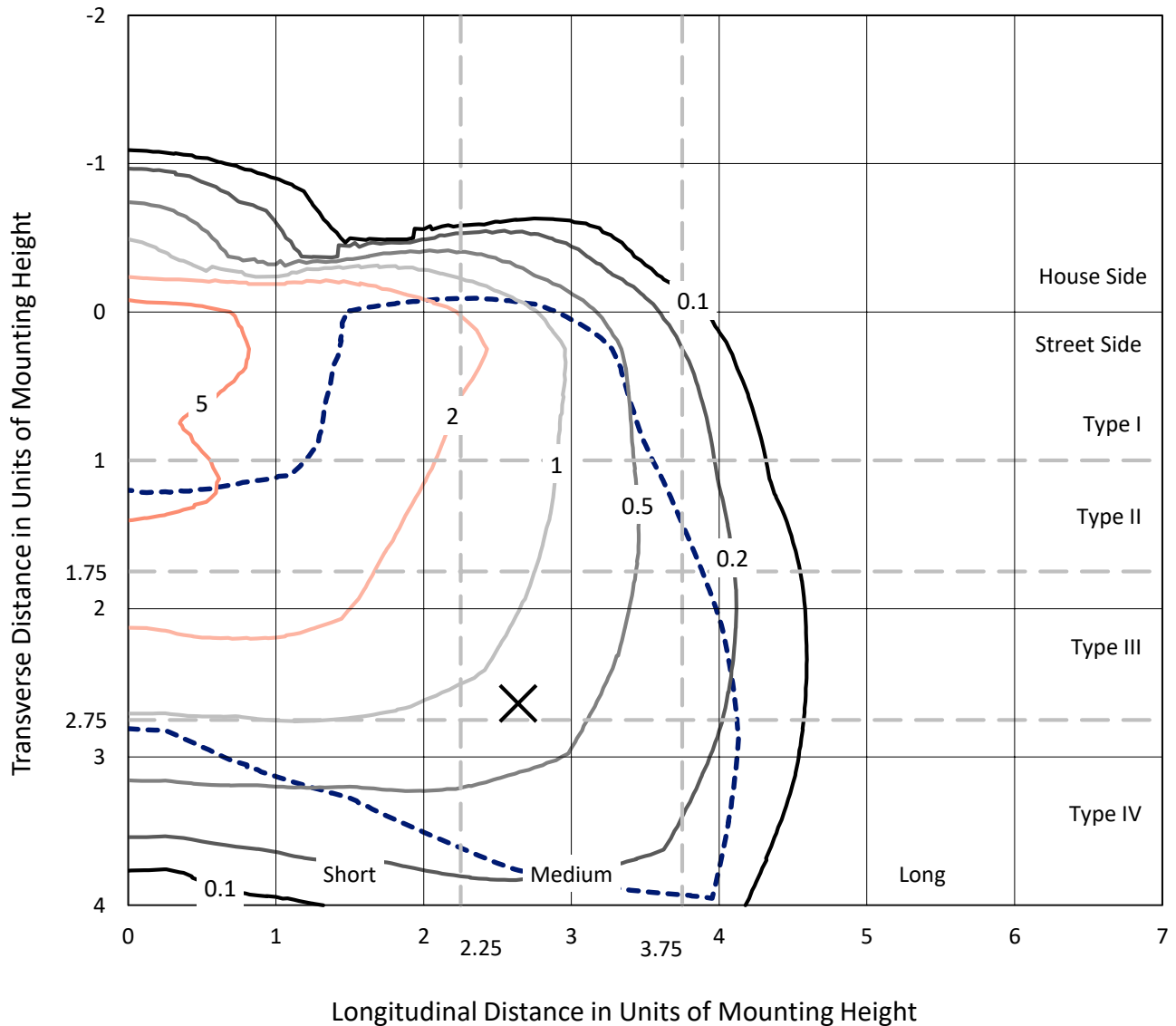


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

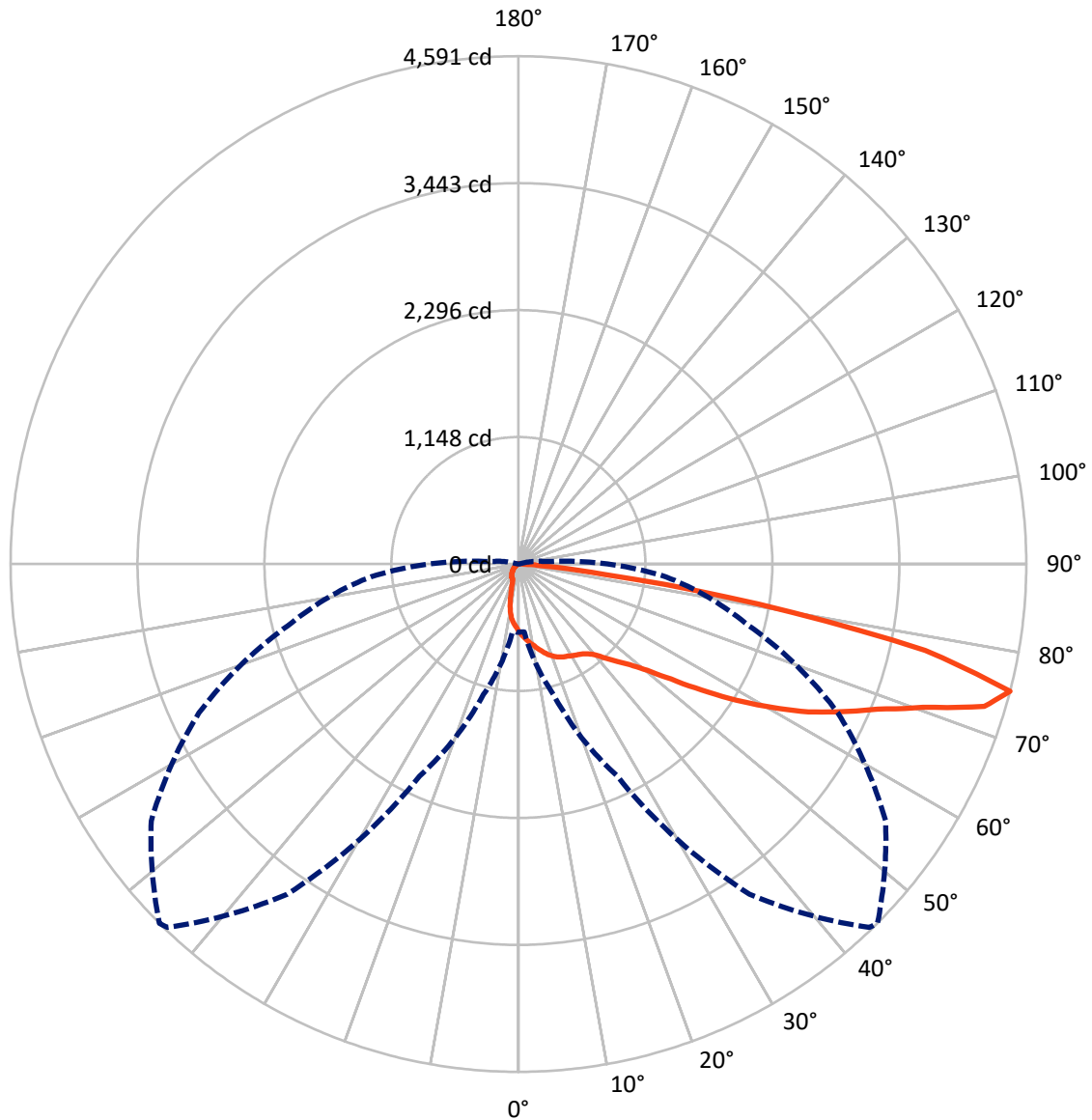


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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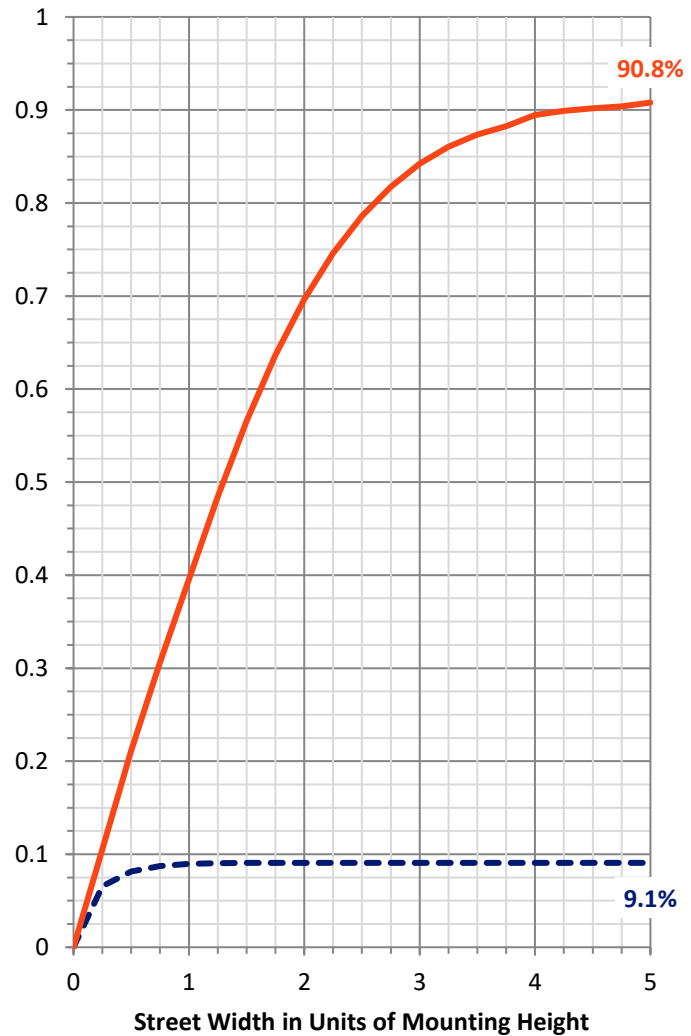
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	522.3	0.0	522.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	5187.7	0.0	5187.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	5710.0	0.0	5710.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	1.0
10°-20°	163.3	2.9
20°-30°	270.4	4.7
30°-40°	391.4	6.9
40°-50°	640.9	11.2
50°-60°	1141.9	20.0
60°-70°	1678.7	29.4
70°-80°	1266.4	22.2
80°-90°	99.4	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°	5710.0	100.0
0°-180°	5710.0	100.0



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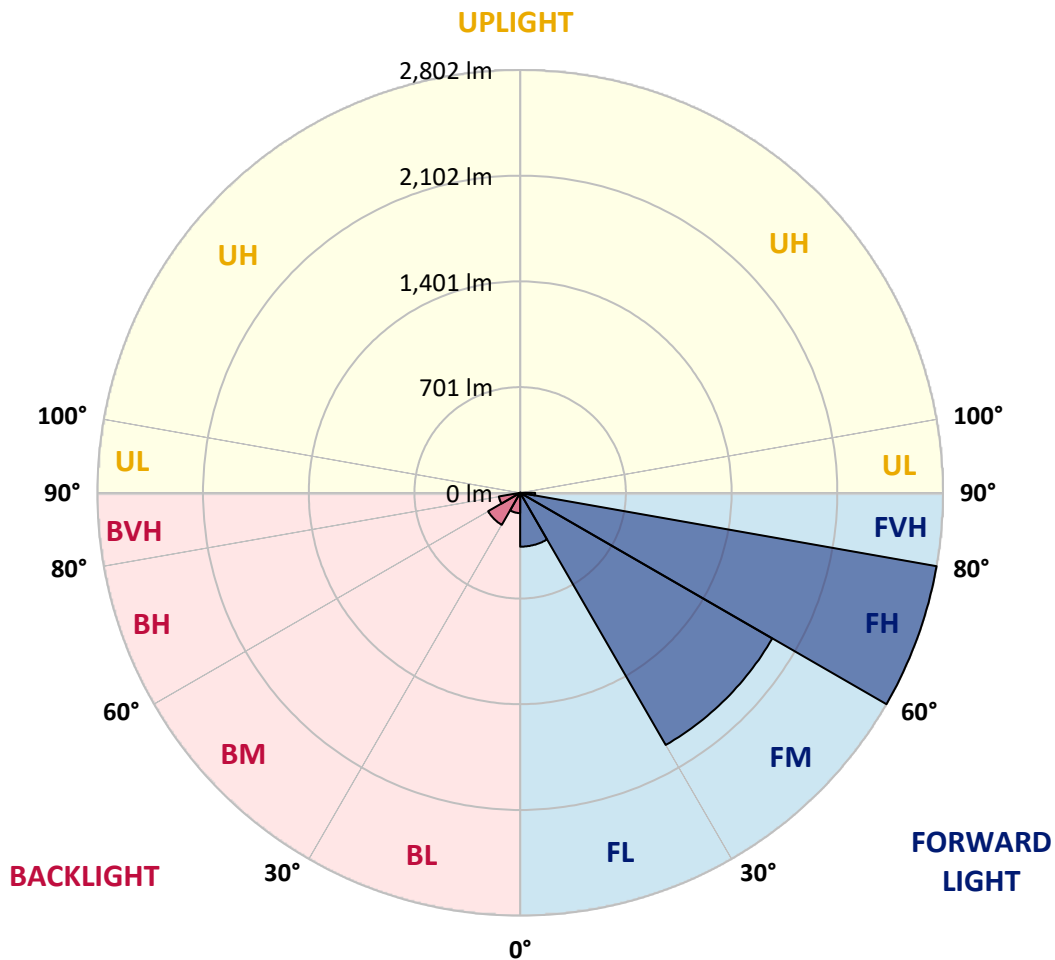
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	357.1	6.3			
FM	(30°-60°)	1929.4	33.8			
FH	(60°-80°)	2802.1	49.1			G2/5000
FVH	(80°-90°)	99.1	1.7			G1/100
BL	(0°-30°)	134.2	2.4	B1/500		
BM	(30°-60°)	244.7	4.3	B1/1000		
BH	(60°-80°)	143.1	2.5	B1/500		G1/500
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°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7
2.5°	663.4	663.4	662.1	660.7	654.0	647.2	645.8	641.8	629.6	621.5	613.4
5°	718.8	720.2	717.5	710.7	695.8	681.0	679.6	668.8	645.8	629.6	612.1
7.5°	771.5	774.2	767.4	755.3	737.7	716.1	714.8	694.5	664.8	641.8	616.1
10°	816.1	816.1	806.6	791.8	772.9	749.9	747.2	724.2	690.4	662.1	628.3
12.5°	864.7	863.4	849.9	829.6	808.0	786.4	785.0	756.6	724.2	687.7	645.8
15°	909.3	906.6	889.1	870.1	847.2	824.2	822.8	794.5	760.7	717.5	671.5
17.5°	933.6	932.3	916.1	897.2	878.2	860.7	859.3	829.6	793.1	748.5	697.2
20°	937.7	939.0	925.5	909.3	898.5	889.1	889.1	862.0	822.8	775.6	724.2
22.5°	939.0	943.1	933.6	912.0	909.3	910.7	913.4	891.8	851.2	806.6	752.6
25°	948.5	953.9	947.1	921.5	918.8	928.2	930.9	921.5	885.0	840.4	785.0
27.5°	967.4	972.8	967.4	935.0	930.9	940.4	943.1	948.5	921.5	872.8	818.8
30°	1005.2	1006.6	994.4	953.9	945.8	958.0	962.0	976.9	955.3	903.9	851.2
32.5°	1071.5	1057.9	1021.5	967.4	960.7	974.2	978.2	994.4	986.3	933.6	885.0
35°	1206.6	1136.3	1052.5	986.3	979.6	993.1	998.5	1021.5	1025.5	975.5	926.9
37.5°	1205.2	1141.7	1125.5	1022.8	1013.4	1022.8	1029.6	1057.9	1074.2	1030.9	987.7
40°	1290.3	1263.3	1263.3	1091.7	1060.6	1074.2	1080.9	1109.3	1137.7	1103.9	1059.3
42.5°	1557.9	1540.3	1521.4	1224.1	1126.9	1164.7	1168.7	1186.3	1220.1	1209.3	1156.6
45°	1856.5	1840.3	1767.3	1448.4	1240.3	1247.1	1256.6	1284.9	1333.6	1353.8	1291.7
47.5°	2090.2	2074.0	2011.8	1718.7	1417.3	1357.9	1357.9	1413.3	1489.0	1540.3	1480.8
50°	2278.0	2259.1	2221.3	2006.4	1707.8	1517.3	1509.2	1574.1	1686.2	1765.9	1725.4
52.5°	2460.4	2405.0	2382.1	2303.7	2036.2	1748.4	1726.8	1772.7	1928.1	2026.7	1992.9
55°	2582.0	2573.9	2549.6	2576.6	2380.7	2029.4	2010.5	2020.0	2214.5	2280.7	2238.8
57.5°	2695.5	2694.2	2748.2	2873.9	2756.3	2351.0	2321.3	2306.4	2491.5	2475.3	2511.8
60°	2836.0	2811.7	2937.4	3117.1	3100.9	2664.4	2630.7	2600.9	2703.6	2657.7	2838.7
62.5°	2842.8	2836.0	3091.4	3349.5	3442.7	2983.3	2944.1	2837.4	2888.7	2836.0	3150.9
65°	2584.7	2618.5	3156.3	3472.4	3729.1	3263.0	3215.7	3049.5	3053.6	3018.4	3518.4
67.5°	2526.6	2544.2	2977.9	3604.8	3935.9	3545.4	3500.8	3294.1	3245.4	3248.1	3735.9
70°	2382.1	2409.1	2756.3	3595.4	4099.4	3922.4	3877.8	3653.5	3535.9	3404.9	3568.4
72.5°	1820.0	1865.9	2322.6	3152.2	4054.8	4415.5	4403.4	4108.8	3652.1	3126.5	2699.6
75°	616.1	614.8	1220.1	2117.2	3642.7	4566.9	4591.2	4052.1	3186.0	2156.4	1340.3
77.5°	132.4	133.8	251.3	858.0	2419.9	3667.0	3760.2	3056.3	2055.1	960.7	306.7
80°	64.9	66.2	104.0	227.0	967.4	2056.4	2202.4	1571.4	759.3	191.9	51.3
82.5°	32.4	33.8	54.0	120.3	358.1	731.0	781.0	578.3	217.5	108.1	25.7
85°	12.2	12.2	27.0	71.6	163.5	171.6	210.8	167.5	131.1	87.8	6.8
87.5°	2.7	2.7	14.9	35.1	73.0	54.0	54.0	51.3	79.7	59.5	2.7
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°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7
2.5°	609.4	604.0	594.5	585.0	578.3	570.2	566.1	562.1	560.7	559.4	562.1
5°	602.6	594.5	576.9	562.1	548.6	537.8	529.6	521.5	517.5	514.8	516.1
7.5°	602.6	590.4	564.8	541.8	520.2	497.2	474.3	456.7	443.2	435.1	436.4
10°	609.4	593.2	559.4	528.3	487.8	439.1	389.1	351.3	325.6	310.8	310.8
12.5°	624.2	602.6	560.7	512.1	443.2	358.1	282.4	236.4	217.5	206.7	208.1
15°	644.5	618.8	567.5	490.5	381.0	266.2	197.3	167.5	167.5	170.2	171.6
17.5°	667.5	639.1	572.9	458.0	301.3	190.5	155.4	152.7	156.7	163.5	163.5
20°	690.4	659.4	575.6	406.7	225.6	151.3	147.3	147.3	150.0	156.7	158.1
22.5°	718.8	685.0	572.9	343.2	168.9	143.2	141.9	141.9	141.9	150.0	150.0
25°	748.5	714.8	562.1	275.6	143.2	137.8	136.5	135.1	135.1	141.9	143.2
27.5°	782.3	745.8	536.4	210.8	135.1	132.4	131.1	128.4	128.4	133.8	133.8
30°	816.1	781.0	497.2	159.4	128.4	127.0	124.3	121.6	118.9	124.3	124.3
32.5°	852.6	817.4	445.9	127.0	118.9	118.9	117.5	113.5	110.8	113.5	114.8
35°	901.2	859.3	387.8	110.8	106.7	106.7	106.7	105.4	100.0	102.7	102.7
37.5°	966.1	917.4	320.2	102.7	97.3	94.6	94.6	94.6	90.5	91.9	91.9
40°	1048.5	985.0	255.4	95.9	90.5	83.8	81.1	82.4	79.7	79.7	78.4
42.5°	1160.6	1057.9	191.9	90.5	85.1	75.7	70.3	68.9	66.2	64.9	64.9
45°	1321.4	1147.1	137.8	85.1	81.1	66.2	60.8	56.7	50.0	45.9	45.9
47.5°	1529.5	1248.5	102.7	79.7	77.0	58.1	51.3	43.2	33.8	31.1	31.1
50°	1783.5	1361.9	86.5	71.6	70.3	51.3	40.5	28.4	18.9	16.2	17.6
52.5°	2030.8	1468.7	77.0	63.5	62.2	44.6	29.7	14.9	8.1	8.1	8.1
55°	2238.8	1544.4	70.3	56.7	54.0	35.1	16.2	6.8	4.1	4.1	4.1
57.5°	2426.6	1587.6	63.5	50.0	43.2	24.3	6.8	2.7	2.7	1.4	1.4
60°	2598.2	1613.3	55.4	43.2	33.8	13.5	2.7	1.4	1.4	0.0	0.0
62.5°	2767.1	1632.2	47.3	35.1	25.7	5.4	1.4	1.4	0.0	0.0	0.0
65°	2895.5	1625.4	37.8	28.4	16.2	2.7	1.4	0.0	0.0	0.0	0.0
67.5°	2891.4	1533.5	28.4	21.6	8.1	1.4	0.0	0.0	0.0	0.0	0.0
70°	2586.1	1291.7	18.9	13.5	2.7	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	1834.8	828.2	12.2	8.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	808.0	251.3	6.8	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	158.1	58.1	4.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	37.8	6.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.2	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	1.4	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)