

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: P265957

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265957
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-AF24-60-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA 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: 4651.2 lumens
Efficiency: N/A
Efficacy: 72.7 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): 64
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

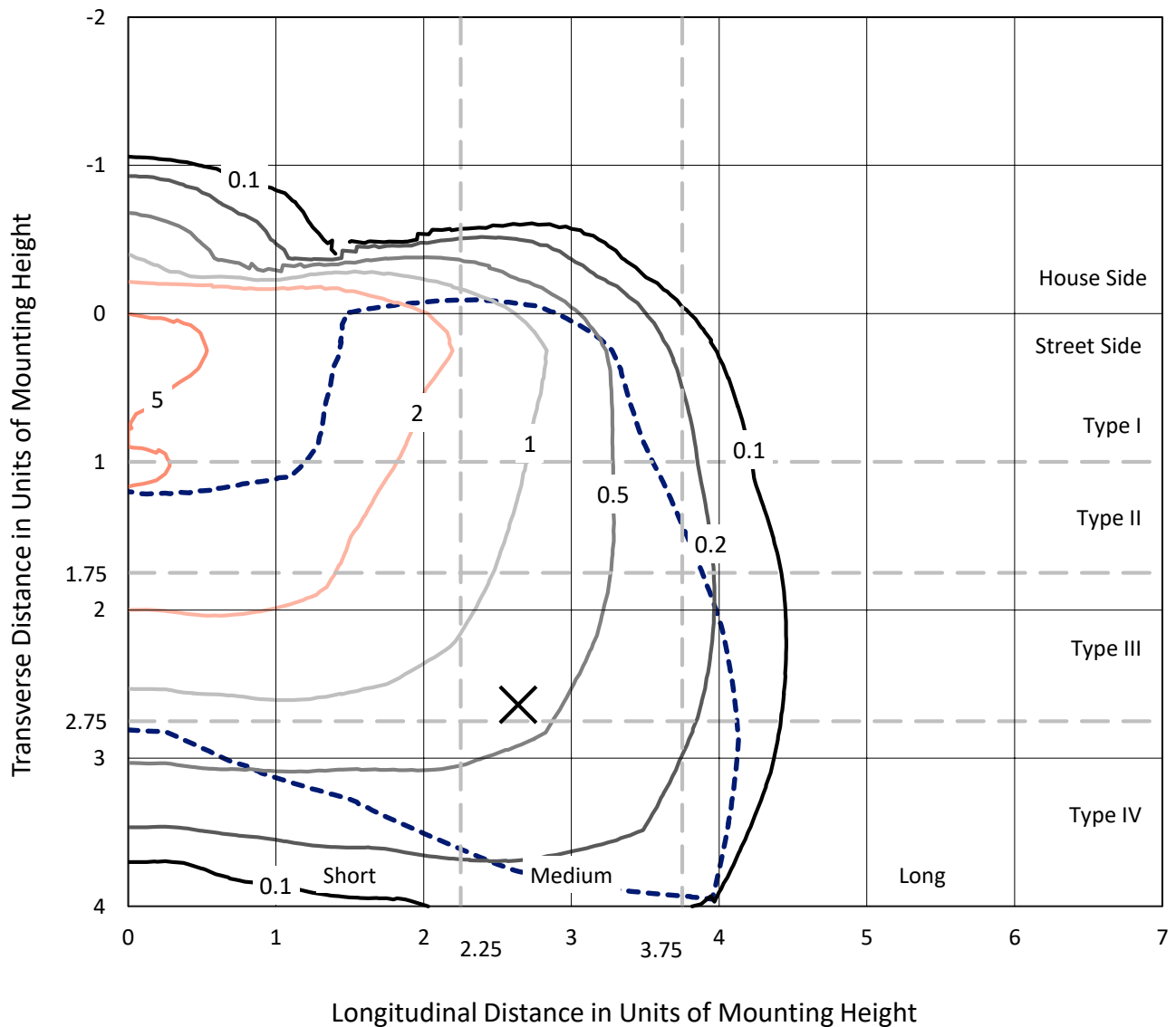


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

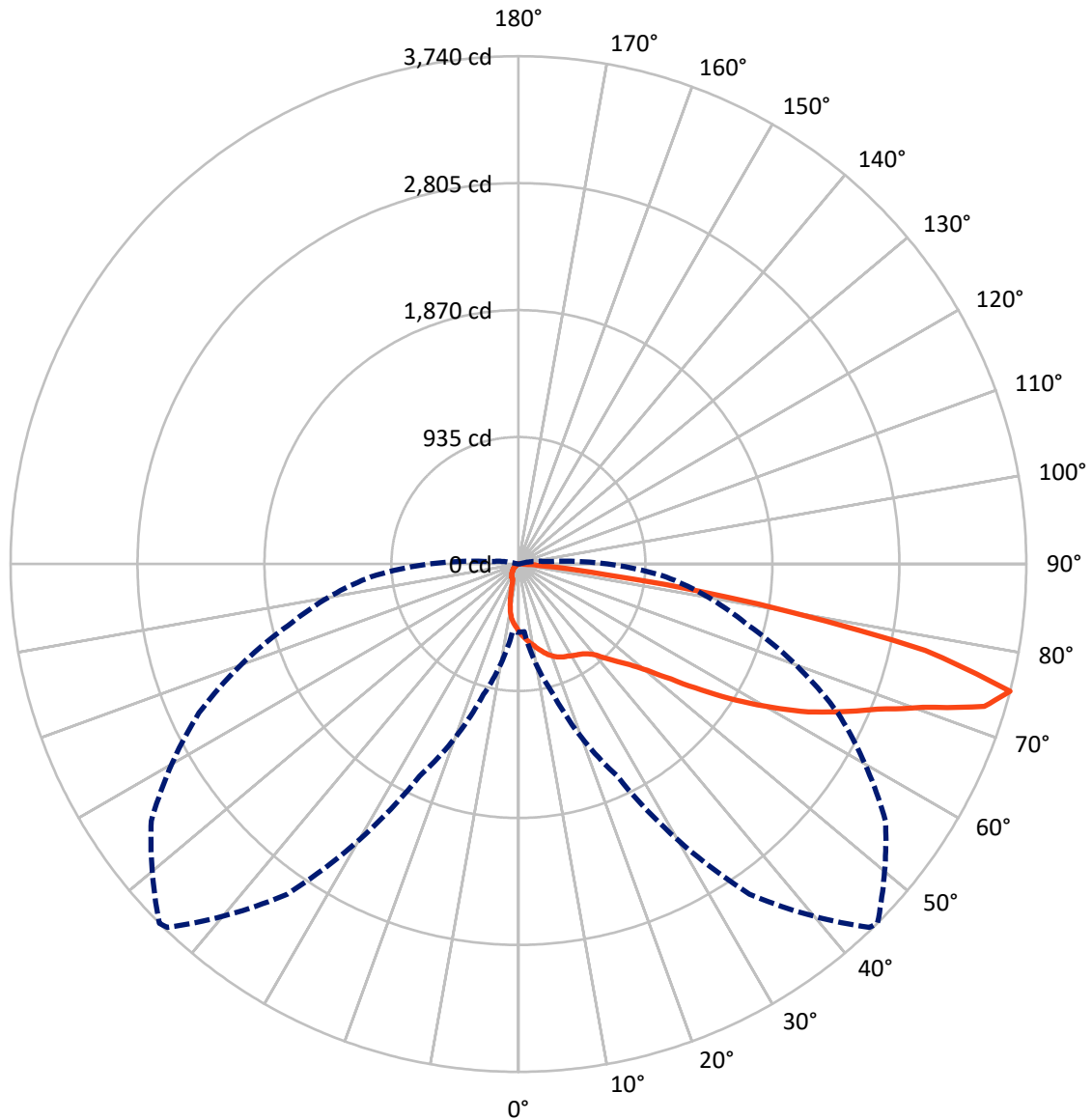


Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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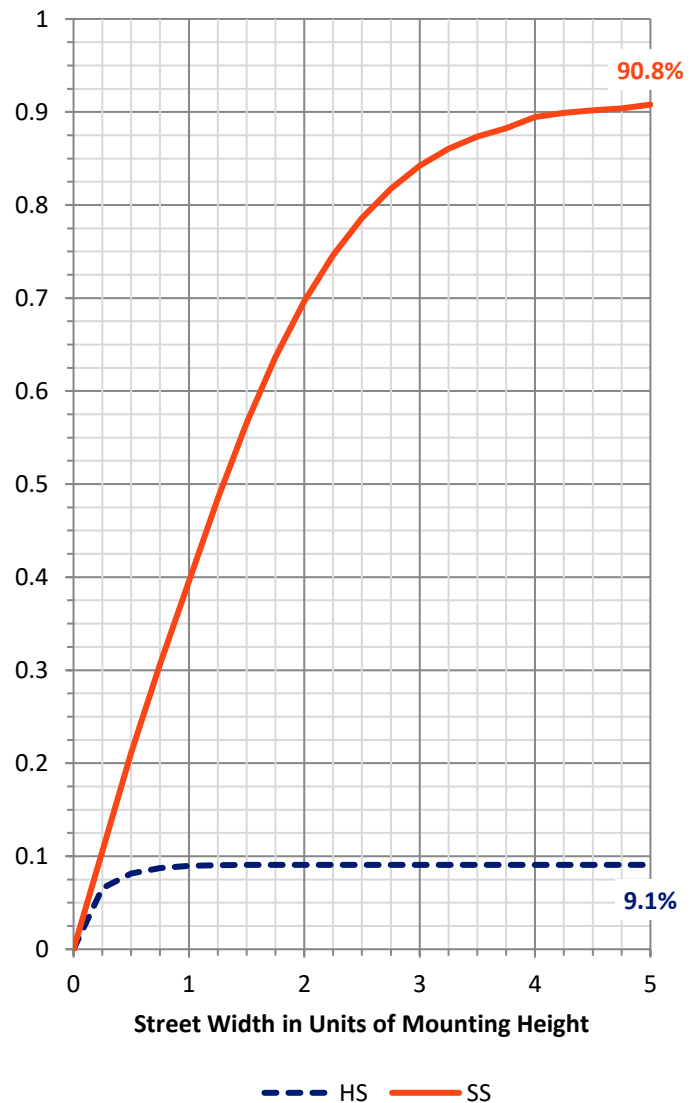
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	425.4	0.0	425.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	4225.8	0.0	4225.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	4651.2	0.0	4651.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.0
10°-20°	133.0	2.9
20°-30°	220.3	4.7
30°-40°	318.8	6.9
40°-50°	522.0	11.2
50°-60°	930.2	20.0
60°-70°	1367.4	29.4
70°-80°	1031.6	22.2
80°-90°	80.9	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°	4651.2	100.0
0°-180°	4651.2	100.0



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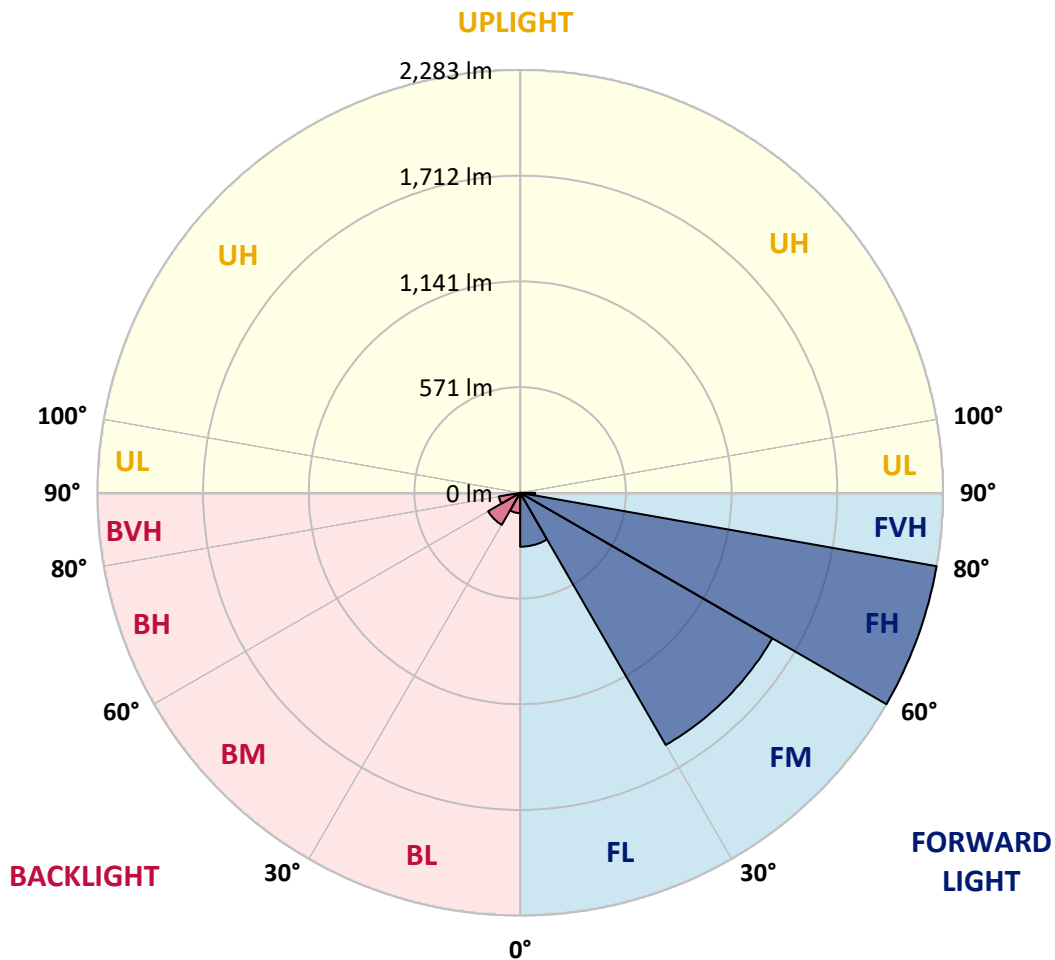
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	290.9	6.3			
FM	(30°-60°)	1571.6	33.8			
FH	(60°-80°)	2282.5	49.1			G2/5000
FVH	(80°-90°)	80.7	1.7			G1/100
BL	(0°-30°)	109.3	2.4	B0/110		
BM	(30°-60°)	199.4	4.3	B0/220		
BH	(60°-80°)	116.5	2.5	B1/500		G1/500
BVH	(80°-90°)	0.2	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°	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
2.5°	540.4	540.4	539.3	538.3	532.6	527.1	526.0	522.9	512.9	506.3	499.6
5°	585.5	586.7	584.4	578.9	566.8	554.8	553.6	544.8	526.0	512.9	498.6
7.5°	628.5	630.6	625.1	615.2	601.0	583.3	582.2	565.8	541.5	522.9	501.9
10°	664.7	664.7	657.1	645.0	629.5	610.8	608.6	589.9	562.3	539.3	511.8
12.5°	704.5	703.4	692.2	675.7	658.2	640.5	639.5	616.3	589.9	560.3	526.0
15°	740.7	738.4	724.3	708.9	690.1	671.4	670.2	647.1	619.7	584.4	547.0
17.5°	760.5	759.3	746.2	730.9	715.4	701.0	700.0	675.7	646.1	609.7	567.9
20°	763.7	764.9	753.9	740.7	731.8	724.3	724.3	702.1	670.2	631.8	589.9
22.5°	764.9	768.2	760.5	742.9	740.7	741.8	743.9	726.4	693.4	657.1	613.1
25°	772.6	777.0	771.6	750.7	748.4	756.2	758.3	750.7	720.9	684.6	639.5
27.5°	788.1	792.5	788.1	761.7	758.3	766.1	768.2	772.6	750.7	711.0	667.0
30°	818.9	820.0	810.0	777.0	770.4	780.4	783.6	795.8	778.1	736.3	693.4
32.5°	872.9	861.7	832.1	788.1	782.6	793.6	796.8	810.0	803.4	760.5	720.9
35°	982.8	925.7	857.4	803.4	798.0	809.0	813.3	832.1	835.3	794.6	755.0
37.5°	981.8	930.0	916.8	833.2	825.5	833.2	838.7	861.7	874.9	839.7	804.5
40°	1051.0	1029.1	1029.1	889.3	864.0	874.9	880.5	903.5	926.7	899.3	862.9
42.5°	1268.9	1254.8	1239.3	997.2	917.9	948.7	952.1	966.3	993.9	985.0	942.1
45°	1512.2	1499.0	1439.7	1179.8	1010.4	1015.9	1023.6	1046.6	1086.3	1102.8	1052.2
47.5°	1702.6	1689.4	1638.8	1400.0	1154.5	1106.2	1106.2	1151.3	1212.9	1254.8	1206.2
50°	1855.5	1840.2	1809.4	1634.3	1391.1	1236.0	1229.4	1282.2	1373.6	1438.5	1405.5
52.5°	2004.2	1959.1	1940.3	1876.5	1658.6	1424.3	1406.6	1443.9	1570.5	1650.9	1623.3
55°	2103.2	2096.6	2076.8	2098.9	1939.4	1653.2	1637.7	1645.4	1803.8	1857.9	1823.6
57.5°	2195.6	2194.6	2238.7	2341.1	2245.3	1915.0	1890.8	1878.7	2029.5	2016.3	2046.0
60°	2310.3	2290.4	2392.7	2539.1	2525.9	2170.5	2142.8	2118.7	2202.4	2164.8	2312.3
62.5°	2315.7	2310.3	2518.2	2728.4	2804.4	2430.2	2398.3	2311.2	2353.1	2310.3	2566.5
65°	2105.4	2132.9	2570.9	2828.6	3037.7	2657.9	2619.5	2484.1	2487.3	2458.8	2866.0
67.5°	2058.1	2072.5	2425.8	2936.4	3206.1	2888.1	2851.7	2683.2	2643.6	2645.9	3043.2
70°	1940.3	1962.3	2245.3	2928.7	3339.3	3195.1	3158.7	2976.1	2880.2	2773.5	2906.7
72.5°	1482.6	1519.9	1891.9	2567.7	3302.9	3596.9	3586.9	3346.9	2974.9	2546.9	2199.1
75°	501.9	500.7	993.9	1724.7	2967.2	3720.1	3739.9	3300.7	2595.3	1756.5	1091.8
77.5°	107.8	109.0	204.8	698.9	1971.2	2987.0	3063.0	2489.7	1674.0	782.6	249.9
80°	52.8	53.9	84.7	185.0	788.1	1675.1	1793.9	1280.1	618.6	156.2	41.9
82.5°	26.4	27.5	44.0	97.9	291.7	595.4	636.2	471.0	177.1	88.0	20.9
85°	9.9	9.9	22.0	58.3	133.2	139.7	171.7	136.5	106.8	71.5	5.5
87.5°	2.2	2.2	12.0	28.7	59.5	44.0	44.0	41.9	64.9	48.4	2.2
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°	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
2.5°	496.4	492.0	484.2	476.6	471.0	464.5	461.2	457.9	456.8	455.6	457.9
5°	490.8	484.2	470.0	457.9	446.8	438.1	431.5	424.9	421.6	419.2	420.4
7.5°	490.8	481.0	460.0	441.3	423.7	405.0	386.4	372.0	360.9	354.4	355.5
10°	496.4	483.2	455.6	430.4	397.3	357.6	317.0	286.2	265.3	253.1	253.1
12.5°	508.5	490.8	456.8	417.2	360.9	291.7	230.1	192.5	177.1	168.4	169.5
15°	525.0	504.0	462.3	399.6	310.4	216.9	160.6	136.5	136.5	138.7	139.7
17.5°	543.7	520.6	466.7	373.1	245.4	155.1	126.7	124.3	127.6	133.2	133.2
20°	562.3	537.0	468.8	331.3	183.9	123.2	120.0	120.0	122.2	127.6	128.7
22.5°	585.5	557.9	466.7	279.6	137.6	116.7	115.5	115.5	115.5	122.2	122.2
25°	609.7	582.2	457.9	224.5	116.7	112.3	111.2	110.0	110.0	115.5	116.7
27.5°	637.3	607.6	436.9	171.7	110.0	107.8	106.8	104.6	104.6	109.0	109.0
30°	664.7	636.2	405.0	129.8	104.6	103.5	101.2	99.1	96.8	101.2	101.2
32.5°	694.5	665.9	363.3	103.5	96.8	96.8	95.8	92.4	90.3	92.4	93.6
35°	734.2	700.0	315.8	90.3	87.0	87.0	87.0	85.9	81.4	83.6	83.6
37.5°	786.9	747.3	260.9	83.6	79.2	77.1	77.1	77.1	73.8	74.9	74.9
40°	854.1	802.4	208.0	78.2	73.8	68.2	66.0	67.2	64.9	64.9	63.8
42.5°	945.5	861.7	156.2	73.8	69.3	61.7	57.2	56.1	53.9	52.8	52.8
45°	1076.3	934.3	112.3	69.3	66.0	53.9	49.5	46.3	40.8	37.4	37.4
47.5°	1245.9	1017.1	83.6	64.9	62.7	47.3	41.9	35.3	27.5	25.3	25.3
50°	1452.7	1109.3	70.4	58.3	57.2	41.9	33.0	23.0	15.5	13.2	14.4
52.5°	1654.1	1196.4	62.7	51.7	50.7	36.3	24.3	12.0	6.6	6.6	6.6
55°	1823.6	1257.9	57.2	46.3	44.0	28.7	13.2	5.5	3.4	3.4	3.4
57.5°	1976.7	1293.2	51.7	40.8	35.3	19.9	5.5	2.2	2.2	1.1	1.1
60°	2116.4	1314.1	45.2	35.3	27.5	11.0	2.2	1.1	1.1	0.0	0.0
62.5°	2254.0	1329.5	38.4	28.7	20.9	4.4	1.1	1.1	0.0	0.0	0.0
65°	2358.6	1324.0	30.8	23.0	13.2	2.2	1.1	0.0	0.0	0.0	0.0
67.5°	2355.3	1249.3	23.0	17.5	6.6	1.1	0.0	0.0	0.0	0.0	0.0
70°	2106.5	1052.2	15.5	11.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1494.6	674.6	9.9	6.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	658.2	204.8	5.5	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	128.7	47.3	3.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	30.8	5.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	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)