

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: P214922

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214922
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-AF16-60-D-U-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4587.8 lumens
Efficiency: N/A
Efficacy: 72.8 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): 63
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

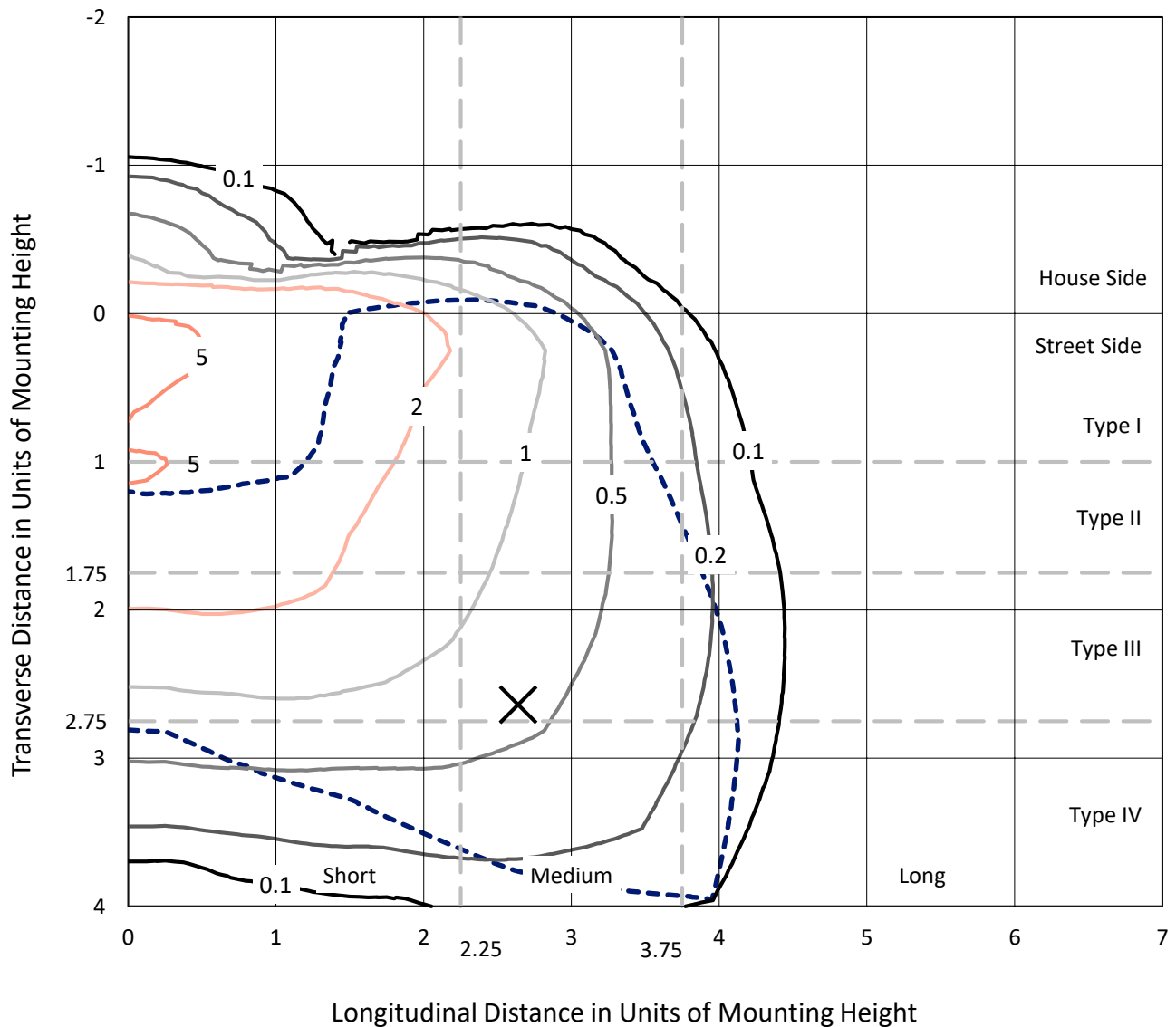


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

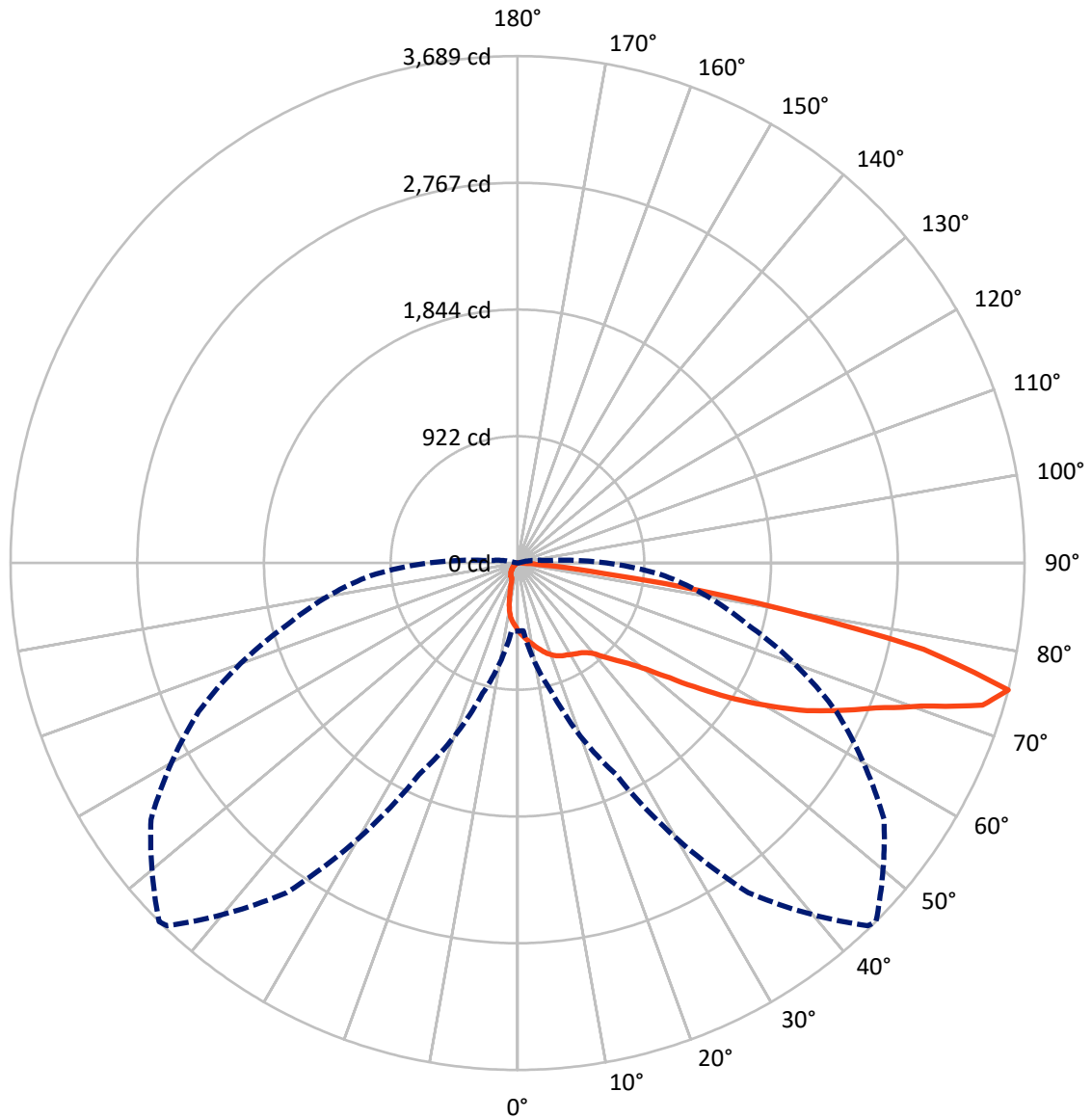


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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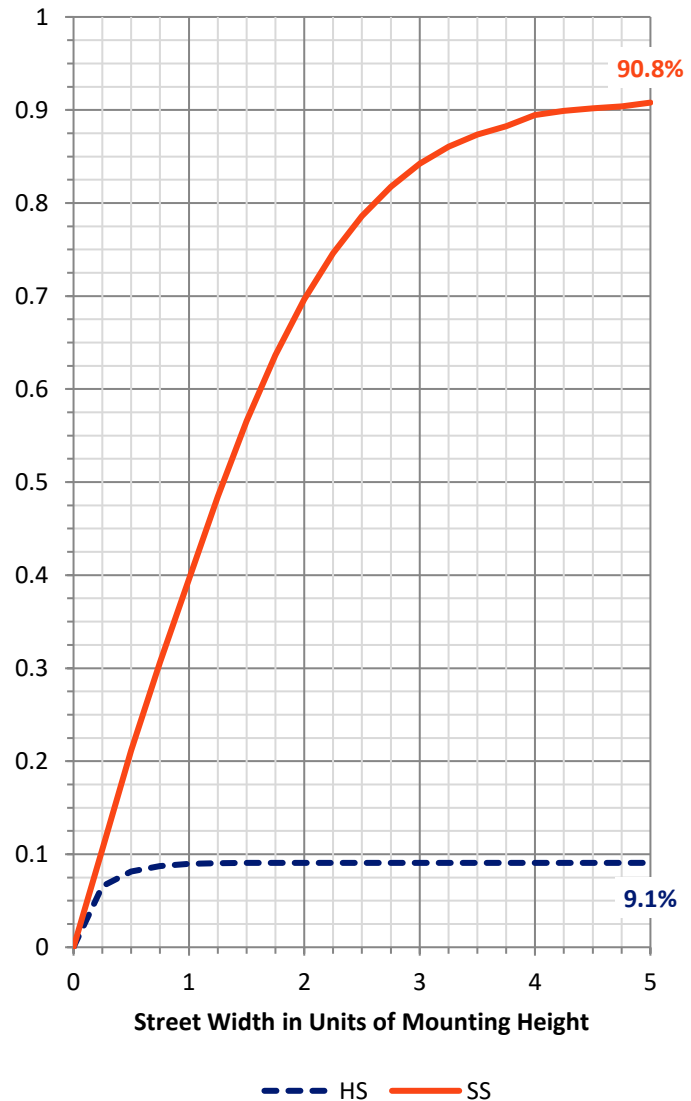
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	419.6	0.0	419.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	4168.1	0.0	4168.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	4587.8	0.0	4587.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	1.0
10°-20°	131.2	2.9
20°-30°	217.3	4.7
30°-40°	314.5	6.9
40°-50°	514.9	11.2
50°-60°	917.5	20.0
60°-70°	1348.8	29.4
70°-80°	1017.5	22.2
80°-90°	79.8	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°	4587.8	100.0
0°-180°	4587.8	100.0



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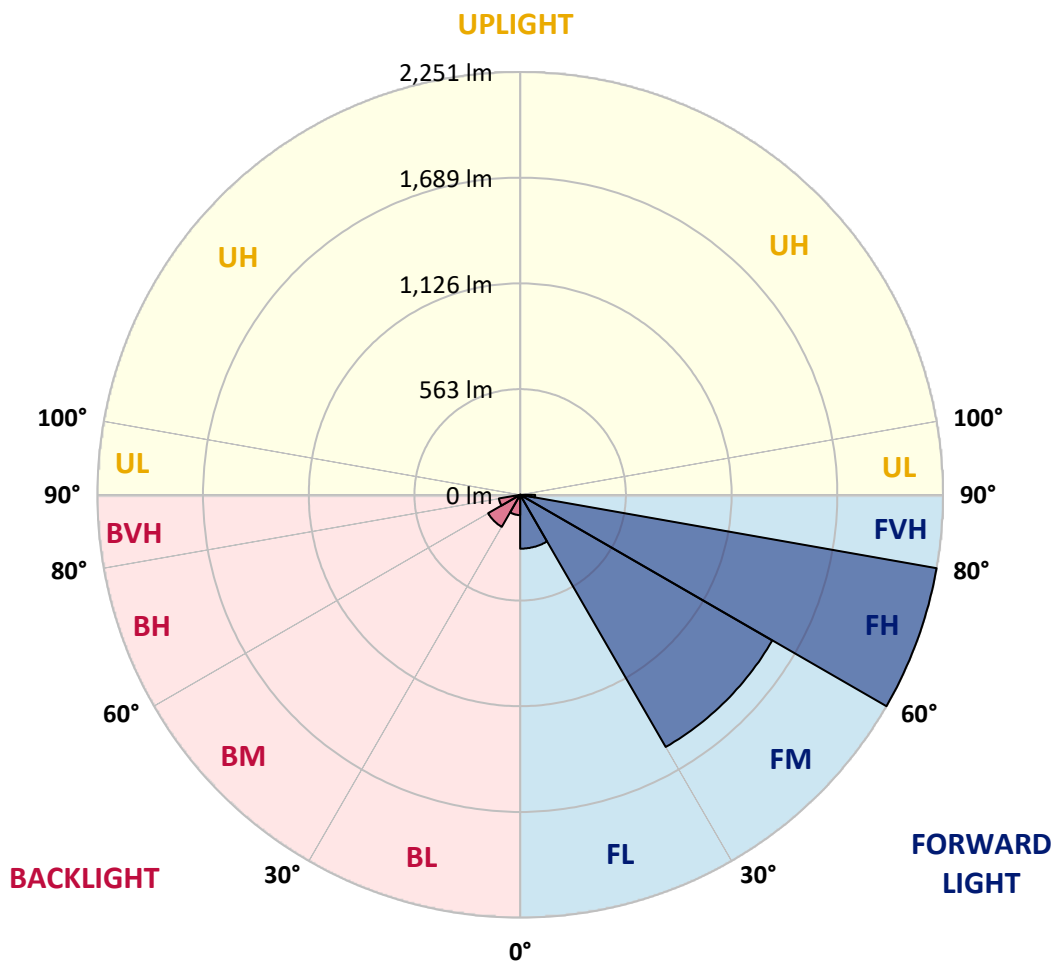
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	287.0	6.3			
FM	(30°-60°)	1550.2	33.8			
FH	(60°-80°)	2251.4	49.1			G2/5000
FVH	(80°-90°)	79.6	1.7			G1/100
BL	(0°-30°)	107.8	2.4	B0/110		
BM	(30°-60°)	196.6	4.3	B0/220		
BH	(60°-80°)	114.9	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°	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7
2.5°	533.0	533.0	532.0	530.9	525.4	520.0	518.9	515.7	505.9	499.5	492.9
5°	577.6	578.6	576.5	571.0	559.1	547.2	546.1	537.3	518.9	505.9	491.7
7.5°	619.8	622.0	616.7	606.8	592.7	575.4	574.2	558.0	534.1	515.7	495.1
10°	655.7	655.7	648.1	636.1	620.9	602.4	600.4	582.0	554.7	532.0	504.8
12.5°	694.8	693.7	682.9	666.6	649.2	631.8	630.8	607.9	582.0	552.6	518.9
15°	730.6	728.4	714.3	699.1	680.6	662.2	661.1	638.3	611.2	576.5	539.5
17.5°	750.2	749.1	736.1	720.8	705.6	691.5	690.4	666.6	637.2	601.5	560.2
20°	753.5	754.4	743.6	730.6	721.8	714.3	714.3	692.6	661.1	623.1	582.0
22.5°	754.4	757.7	750.2	732.8	730.6	731.7	733.9	716.5	684.0	648.1	604.6
25°	762.1	766.5	761.0	740.3	738.1	745.8	748.0	740.3	711.1	675.2	630.8
27.5°	777.3	781.6	777.3	751.2	748.0	755.5	757.7	762.1	740.3	701.3	657.8
30°	807.7	808.7	799.0	766.5	759.9	769.7	772.9	784.9	767.5	726.2	684.0
32.5°	860.9	850.0	820.7	777.3	771.8	782.8	786.0	799.0	792.4	750.2	711.1
35°	969.4	913.0	845.6	792.4	787.1	797.9	802.3	820.7	824.0	783.8	744.7
37.5°	968.4	917.3	904.3	821.8	814.2	821.8	827.2	850.0	863.0	828.3	793.6
40°	1036.8	1015.0	1015.0	877.2	852.2	863.0	868.5	891.2	914.1	886.9	851.1
42.5°	1251.7	1237.6	1222.4	983.6	905.4	935.8	939.1	953.2	980.3	971.7	929.2
45°	1491.6	1478.6	1420.0	1163.7	996.6	1002.0	1009.5	1032.4	1071.5	1087.7	1037.9
47.5°	1679.5	1666.4	1616.5	1380.9	1138.8	1091.1	1091.1	1135.5	1196.3	1237.6	1189.9
50°	1830.3	1815.2	1784.7	1612.1	1372.2	1219.2	1212.6	1264.6	1354.9	1418.8	1386.3
52.5°	1976.8	1932.4	1913.9	1851.0	1636.0	1404.7	1387.4	1424.3	1549.2	1628.4	1601.3
55°	2074.7	2068.1	2048.5	2070.3	1912.8	1630.5	1615.4	1622.9	1779.3	1832.5	1798.9
57.5°	2165.7	2164.7	2208.1	2309.0	2214.5	1889.0	1865.0	1853.1	2001.8	1988.8	2018.1
60°	2278.7	2259.2	2360.1	2504.4	2491.4	2140.8	2113.6	2089.8	2172.3	2135.4	2280.8
62.5°	2284.1	2278.7	2483.8	2691.2	2766.1	2397.0	2365.5	2279.8	2321.0	2278.7	2531.6
65°	2076.8	2103.9	2535.9	2789.9	2996.2	2621.6	2583.8	2450.1	2453.4	2425.2	2826.9
67.5°	2030.0	2044.1	2392.7	2896.4	3162.3	2848.6	2812.8	2646.7	2607.6	2609.7	3001.7
70°	1913.9	1935.6	2214.5	2888.9	3293.7	3151.5	3115.6	2935.5	2841.0	2735.8	2867.1
72.5°	1462.3	1499.2	1866.1	2532.7	3257.9	3547.7	3538.0	3301.3	2934.3	2512.1	2169.1
75°	495.1	494.0	980.3	1701.1	2926.7	3669.4	3688.8	3255.7	2559.8	1732.7	1076.9
77.5°	106.4	107.5	201.9	689.3	1944.3	2946.2	3021.2	2455.6	1651.2	771.8	246.4
80°	52.1	53.2	83.6	182.4	777.3	1652.3	1769.6	1262.6	610.1	154.2	41.3
82.5°	26.0	27.1	43.3	96.5	287.7	587.3	627.4	464.7	174.9	86.9	20.6
85°	9.8	9.8	21.8	57.6	131.3	137.8	169.4	134.6	105.3	70.6	5.5
87.5°	2.1	2.1	11.9	28.2	58.7	43.3	43.3	41.3	64.0	47.7	2.1
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°	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7	490.7
2.5°	489.6	485.2	477.7	470.1	464.7	458.2	454.8	451.6	450.4	449.4	451.6
5°	484.1	477.7	463.6	451.6	440.8	432.1	425.6	419.0	415.7	413.6	414.7
7.5°	484.1	474.4	453.8	435.3	417.9	399.5	381.1	366.9	356.0	349.5	350.6
10°	489.6	476.6	449.4	424.5	391.9	352.8	312.7	282.2	261.6	249.6	249.6
12.5°	501.5	484.1	450.4	411.5	356.0	287.7	226.9	190.0	174.9	166.1	167.1
15°	517.8	497.2	455.9	394.1	306.2	213.8	158.5	134.6	134.6	136.8	137.8
17.5°	536.3	513.5	460.3	367.9	242.1	153.1	124.9	122.7	125.9	131.3	131.3
20°	554.7	529.8	462.5	326.8	181.3	121.6	118.3	118.3	120.5	125.9	127.1
22.5°	577.6	550.4	460.3	275.8	135.7	115.0	113.9	113.9	113.9	120.5	120.5
25°	601.5	574.2	451.6	221.5	115.0	110.7	109.7	108.6	108.6	113.9	115.0
27.5°	628.6	599.3	431.0	169.4	108.6	106.4	105.3	103.1	103.1	107.5	107.5
30°	655.7	627.4	399.5	128.1	103.1	102.0	99.9	97.7	95.5	99.9	99.9
32.5°	685.0	656.7	358.3	102.0	95.5	95.5	94.4	91.2	89.0	91.2	92.4
35°	724.1	690.4	311.6	89.0	85.8	85.8	85.8	84.6	80.3	82.5	82.5
37.5°	776.2	737.2	257.3	82.5	78.1	76.1	76.1	76.1	72.7	73.9	73.9
40°	842.4	791.4	205.2	77.0	72.7	67.3	65.1	66.2	64.0	64.0	63.0
42.5°	932.5	850.0	154.2	72.7	68.4	60.7	56.5	55.4	53.2	52.1	52.1
45°	1061.7	921.7	110.7	68.4	65.1	53.2	48.8	45.6	40.2	36.9	36.9
47.5°	1228.9	1003.1	82.5	64.0	61.8	46.7	41.3	34.8	27.1	25.0	25.0
50°	1432.9	1094.2	69.5	57.6	56.5	41.3	32.6	22.8	15.2	13.0	14.1
52.5°	1631.7	1180.0	61.8	51.1	49.9	35.8	23.9	11.9	6.5	6.5	6.5
55°	1798.9	1240.8	56.5	45.6	43.3	28.2	13.0	5.5	3.3	3.3	3.3
57.5°	1949.7	1275.6	51.1	40.2	34.8	19.5	5.5	2.1	2.1	1.1	1.1
60°	2087.6	1296.3	44.5	34.8	27.1	10.8	2.1	1.1	1.1	0.0	0.0
62.5°	2223.3	1311.4	38.0	28.2	20.6	4.4	1.1	1.1	0.0	0.0	0.0
65°	2326.4	1305.9	30.4	22.8	13.0	2.1	1.1	0.0	0.0	0.0	0.0
67.5°	2323.2	1232.1	22.8	17.4	6.5	1.1	0.0	0.0	0.0	0.0	0.0
70°	2077.8	1037.9	15.2	10.8	2.1	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1474.2	665.5	9.8	6.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	649.2	201.9	5.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	127.1	46.7	3.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	30.4	5.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	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)