

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: P257677

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-60-D-U-T2U-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4415.1 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 63
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

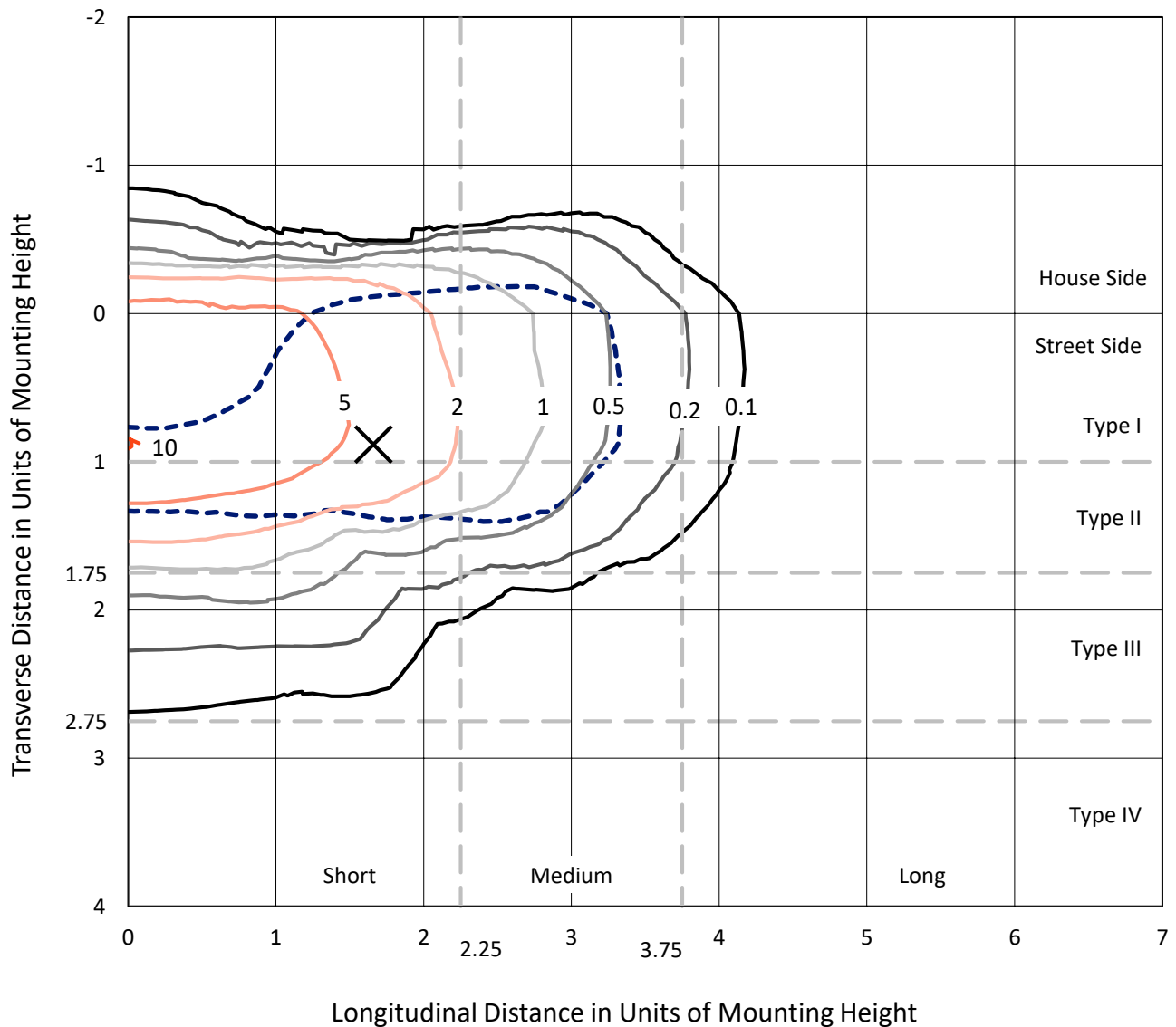


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

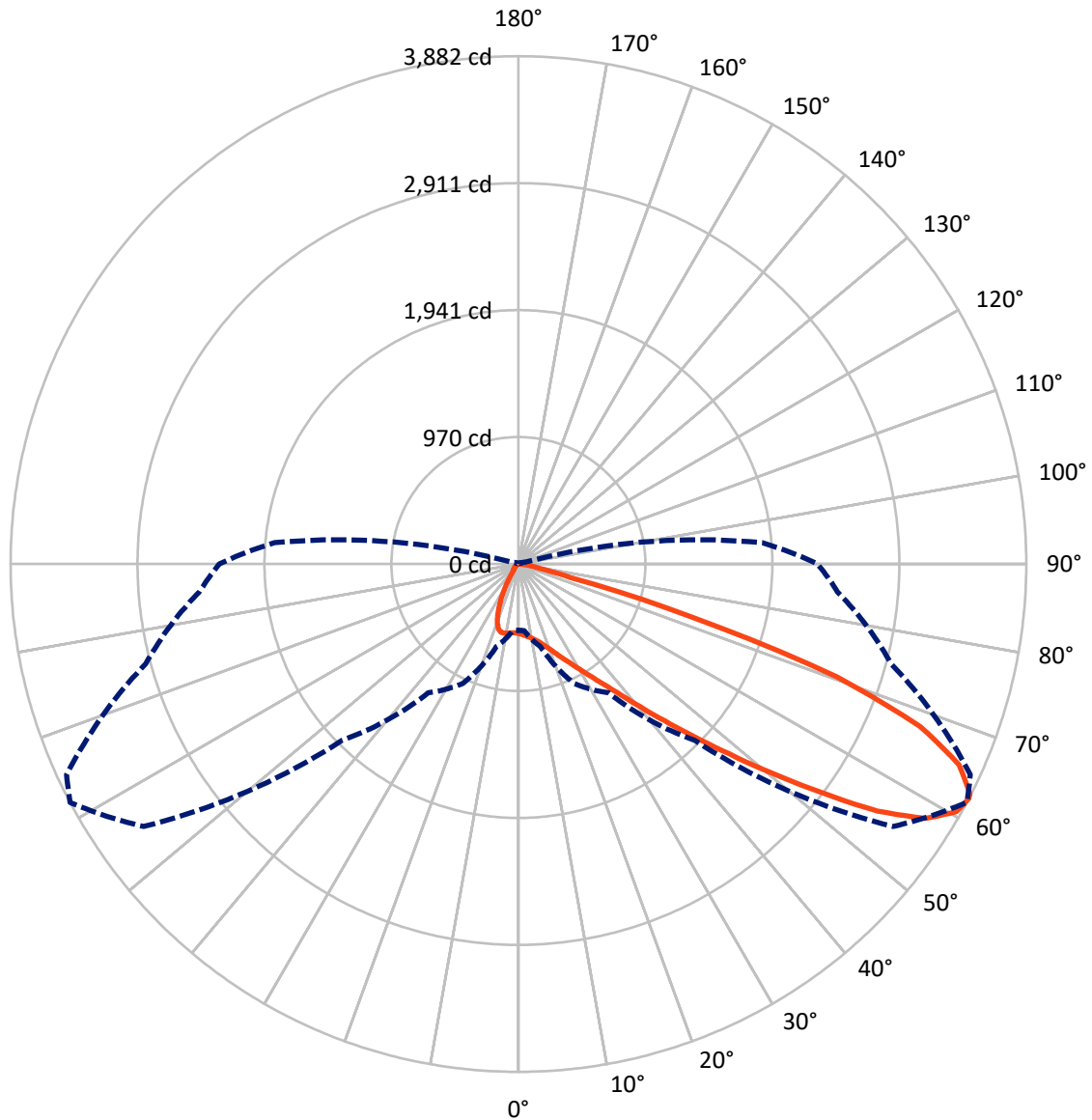


Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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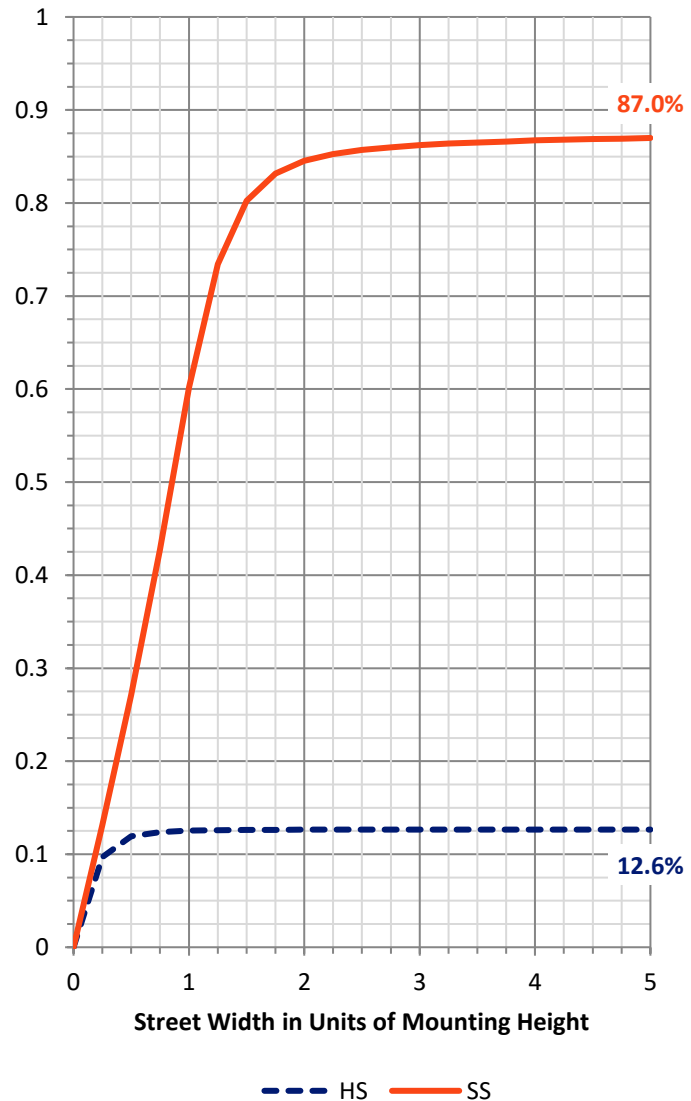
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	564.5	0.0	564.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3850.6	0.0	3850.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	4415.1	0.0	4415.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	1.2
10°-20°	142.9	3.2
20°-30°	240.0	5.4
30°-40°	460.2	10.4
40°-50°	939.9	21.3
50°-60°	1243.8	28.2
60°-70°	966.2	21.9
70°-80°	348.7	7.9
80°-90°	22.2	0.5
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°	4415.1	100.0
0°-180°	4415.1	100.0

Coefficient of Utilization



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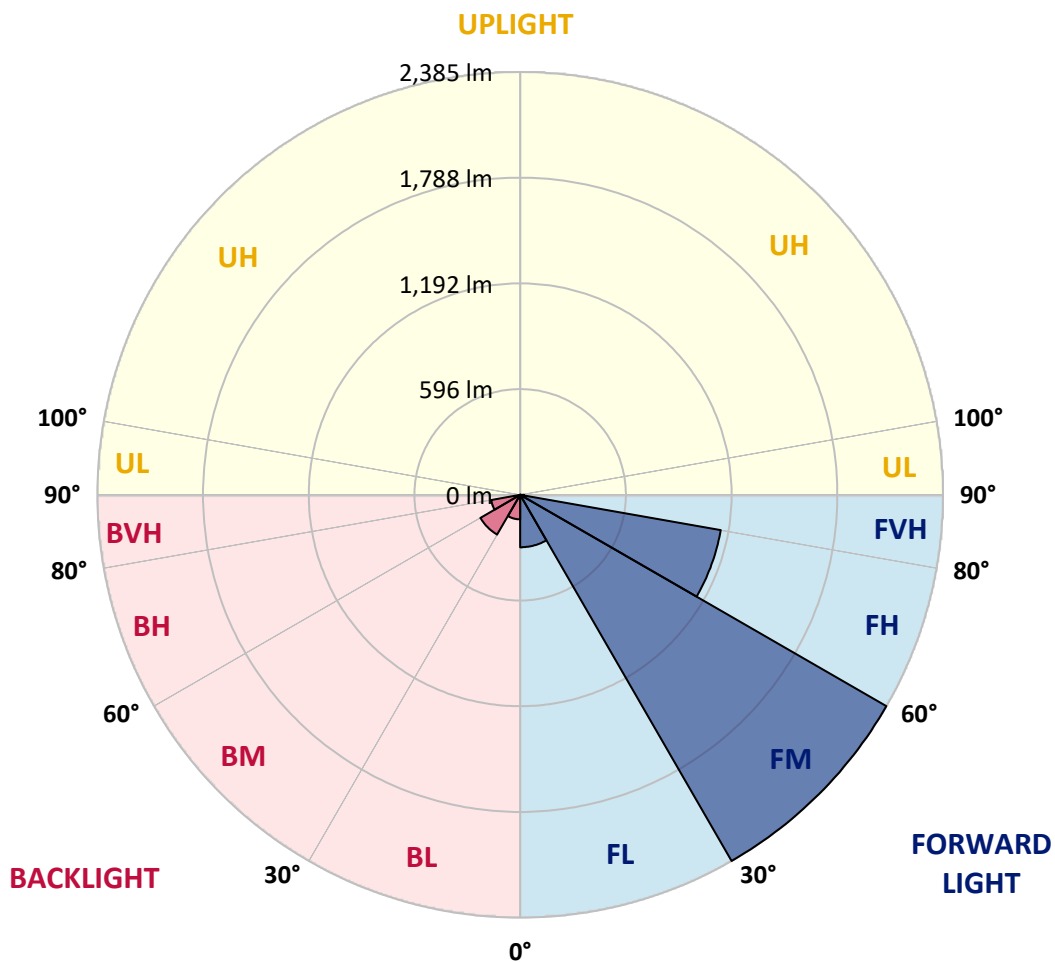
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.0	6.7			
FM	(30°-60°)	2384.6	54.0			
FH	(60°-80°)	1148.7	26.0			G1/1800
FVH	(80°-90°)	21.3	0.5			G1/100
BL	(0°-30°)	138.2	3.1	B1/500		
BM	(30°-60°)	259.2	5.9	B1/1000		
BH	(60°-80°)	166.2	3.8	B1/500		G1/500
BVH	(80°-90°)	1.0	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9
2.5°	546.0	544.8	543.8	542.7	542.7	541.6	540.5	538.4	536.3	534.1	532.9
5°	555.7	554.7	553.6	554.7	553.6	553.6	552.6	550.3	548.2	544.8	541.6
7.5°	563.3	562.2	561.1	562.2	563.3	564.5	565.5	563.3	562.2	557.9	554.7
10°	573.1	572.0	571.0	573.1	573.1	578.5	579.6	578.5	577.4	574.1	568.8
12.5°	587.3	588.4	588.4	590.4	592.6	599.2	601.4	598.0	598.0	593.8	587.3
15°	613.3	613.3	613.3	615.4	616.6	625.2	627.3	624.1	626.3	618.7	612.2
17.5°	638.2	639.2	641.5	645.8	645.8	653.5	657.7	657.7	662.1	652.4	643.6
20°	663.2	664.3	667.6	677.3	677.3	687.1	694.7	697.9	702.3	692.4	677.3
22.5°	690.3	690.3	695.8	710.9	707.7	727.2	741.4	746.8	751.1	738.0	714.2
25°	731.6	727.2	731.6	745.7	743.5	770.8	796.7	802.2	807.5	792.3	756.5
27.5°	809.7	803.3	788.0	789.1	789.1	820.5	857.4	865.2	868.4	855.3	810.8
30°	966.1	966.1	909.6	871.6	846.6	874.8	926.9	939.9	944.3	924.8	866.2
32.5°	1238.5	1238.5	1134.3	1037.6	943.2	943.2	1002.9	1026.8	1031.2	1008.4	939.9
35°	1585.8	1583.6	1427.4	1294.9	1110.4	1040.9	1091.9	1132.2	1145.1	1114.8	1035.6
37.5°	1954.8	1940.8	1772.5	1620.6	1367.6	1197.3	1212.4	1265.7	1277.6	1252.5	1159.2
40°	2254.4	2238.1	2102.4	1975.5	1699.7	1446.9	1386.1	1434.9	1449.1	1414.4	1306.8
42.5°	2525.8	2485.6	2392.3	2301.1	2081.8	1878.9	1617.2	1636.8	1652.0	1615.2	1473.0
45°	2722.3	2660.4	2612.6	2584.4	2468.2	2353.2	1916.9	1877.8	1883.2	1837.6	1654.1
47.5°	2727.6	2684.3	2688.7	2762.4	2810.1	2805.9	2306.6	2167.6	2147.0	2071.0	1847.5
50°	2467.2	2492.2	2571.4	2782.0	3040.3	3196.6	2770.0	2510.7	2448.7	2312.0	2039.6
52.5°	2033.0	2072.1	2220.8	2575.8	3074.0	3453.9	3250.9	2902.5	2791.8	2550.7	2187.2
55°	1592.4	1594.5	1750.8	2112.3	2849.3	3500.5	3635.2	3333.4	3164.0	2732.0	2284.8
57.5°	1095.3	1154.9	1353.5	1596.8	2342.4	3268.3	3779.5	3667.8	3449.6	2843.8	2353.2
60°	717.5	720.8	951.9	1233.1	1594.5	2659.4	3691.6	3844.7	3680.7	2910.0	2399.9
62°	505.8	511.3	654.6	1007.3	1201.7	1906.0	3497.3	3881.6	3811.0	2949.1	2448.7
62.5°	468.9	473.2	593.8	950.9	1128.8	1709.6	3427.8	3872.8	3830.5	2962.1	2466.1
65°	344.0	344.0	388.6	653.5	827.1	923.7	2904.6	3700.3	3804.4	3066.4	2531.2
67.5°	265.9	268.1	283.3	402.7	624.1	560.1	1853.9	3311.6	3533.1	3220.5	2568.1
70°	229.0	228.0	238.8	267.0	450.4	372.3	816.2	2584.4	2958.8	3181.4	2534.5
72.5°	169.4	170.5	195.3	234.5	313.7	242.0	369.1	1372.0	1919.0	2490.0	2172.0
75°	108.5	109.6	137.8	184.5	225.7	158.4	212.7	409.1	785.9	1380.7	1328.6
77.5°	72.7	74.9	90.1	129.2	197.5	98.8	133.6	171.5	236.6	517.8	476.5
80°	48.8	48.8	57.6	86.9	124.8	82.5	71.7	113.9	122.7	160.6	80.3
82.5°	32.6	32.6	38.0	57.6	81.4	73.9	43.3	61.8	71.7	80.3	28.2
85°	19.5	19.5	26.0	35.8	53.2	41.3	28.2	34.8	36.9	51.1	15.2
87.5°	11.9	10.8	17.4	24.9	28.2	24.9	18.5	18.5	19.5	28.2	7.6
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°	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9	531.9
2.5°	530.8	529.7	528.6	526.4	523.2	521.0	518.9	516.7	514.5	514.5	517.8
5°	540.5	537.3	532.9	528.6	522.1	517.8	514.5	510.1	507.9	507.9	509.0
7.5°	552.6	549.2	541.6	534.1	524.2	516.7	509.0	499.4	491.6	488.5	491.6
10°	565.5	561.1	550.3	538.4	527.5	507.9	483.0	452.7	426.5	414.6	420.1
12.5°	581.8	576.4	563.3	547.1	522.1	474.3	412.5	341.9	297.4	276.8	281.2
15°	605.7	598.0	579.6	554.7	499.4	396.2	295.2	213.8	172.6	155.2	157.5
17.5°	633.9	624.1	599.2	552.6	440.7	285.5	175.8	124.8	107.5	103.1	103.1
20°	664.3	651.3	618.7	536.3	351.7	179.0	109.6	95.5	89.0	85.8	85.8
22.5°	695.8	678.4	635.1	498.2	250.7	111.8	90.1	80.3	72.7	69.5	69.5
25°	733.7	710.9	651.3	432.0	159.5	90.1	77.0	67.3	59.6	55.4	56.5
27.5°	778.3	749.0	665.4	349.5	103.1	78.1	64.0	54.3	47.7	45.6	45.6
30°	824.9	790.2	668.6	261.5	83.6	67.3	53.2	44.5	40.2	38.0	38.0
32.5°	889.0	843.4	658.9	173.7	70.6	56.5	44.5	36.9	33.7	32.6	32.6
35°	973.6	912.9	636.1	107.5	59.6	46.7	36.9	32.6	29.3	28.2	28.2
37.5°	1081.1	1009.4	595.9	73.9	51.1	38.0	31.4	28.2	26.0	24.9	24.9
40°	1224.4	1126.7	543.8	64.0	43.3	32.6	27.1	24.9	22.8	22.8	22.8
42.5°	1376.3	1268.8	476.5	56.5	36.9	28.2	23.9	21.8	20.6	19.5	19.5
45°	1542.4	1414.4	392.9	49.9	31.4	24.9	21.8	18.5	17.4	17.4	17.4
47.5°	1707.4	1564.1	301.8	43.3	27.1	21.8	18.5	16.3	15.2	14.1	14.1
50°	1876.7	1699.7	221.5	38.0	23.9	19.5	16.3	14.1	11.9	10.8	10.8
52.5°	1999.3	1781.3	161.7	32.6	20.6	16.3	13.0	10.8	8.6	7.6	7.6
55°	2089.5	1831.1	118.3	27.1	18.5	14.1	10.8	8.6	6.5	6.5	5.5
57.5°	2160.0	1855.0	89.0	23.9	16.3	11.9	8.6	6.5	5.5	4.4	4.4
60°	2214.2	1856.1	66.2	19.5	14.1	9.8	6.5	4.4	3.3	3.3	3.3
62°	2285.9	1870.2	54.3	16.3	13.0	8.6	5.5	3.3	2.1	1.1	1.1
62.5°	2306.6	1875.7	52.1	16.3	11.9	7.6	4.4	3.3	2.1	1.1	1.1
65°	2402.1	1885.4	40.2	13.0	9.8	6.5	3.3	2.1	0.0	0.0	0.0
67.5°	2488.9	1870.2	29.3	9.8	7.6	4.4	3.3	1.1	0.0	0.0	0.0
70°	2480.1	1765.9	20.6	6.5	5.5	3.3	2.1	0.0	0.0	0.0	0.0
72.5°	2043.9	1322.0	14.1	5.5	3.3	2.1	1.1	0.0	0.0	0.0	0.0
75°	1234.2	578.5	9.8	3.3	3.3	2.1	1.1	0.0	0.0	0.0	0.0
77.5°	405.0	209.4	6.5	2.1	2.1	1.1	1.1	0.0	0.0	0.0	0.0
80°	66.2	34.8	3.3	2.1	2.1	1.1	1.1	0.0	0.0	0.0	0.0
82.5°	20.6	8.6	2.1	2.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
85°	7.6	3.3	2.1	2.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	2.1	2.1	2.1	1.1	1.1	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)