

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: P348959

Luminaire Tested: **ARCH-N-PA1-60-827-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348959  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-60-827-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1160mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5608 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

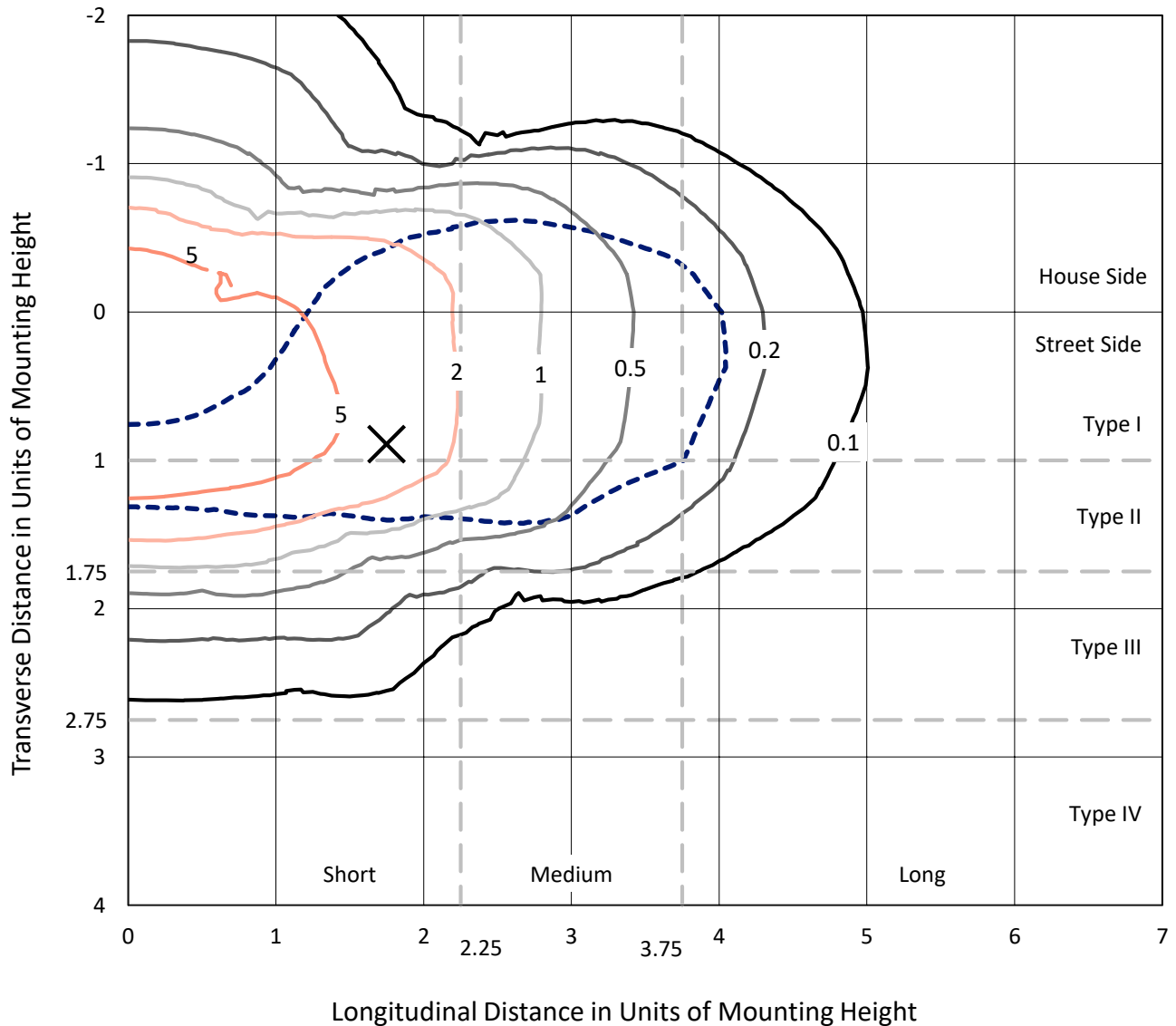
Input Watts (W): 62  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

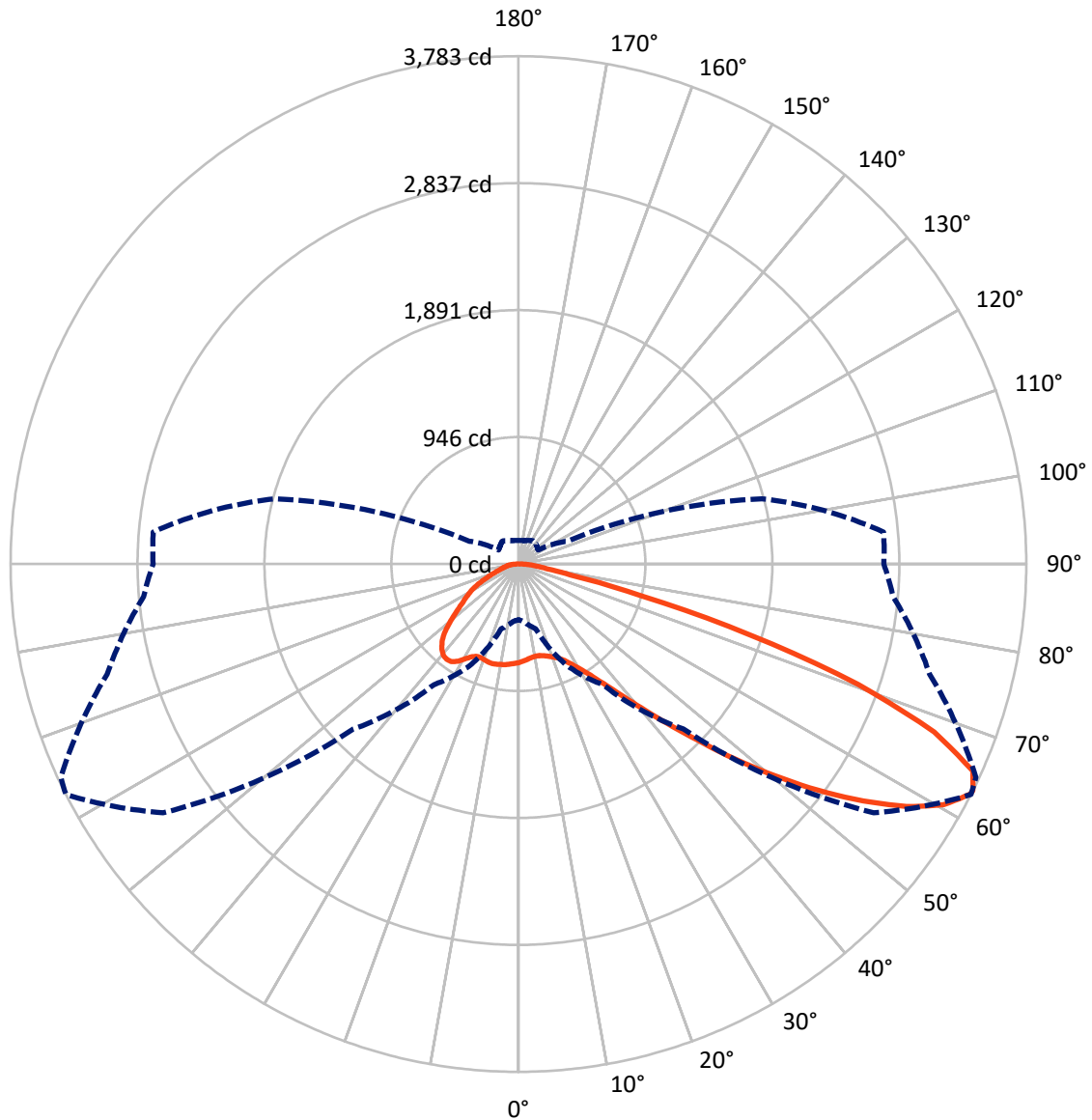
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical



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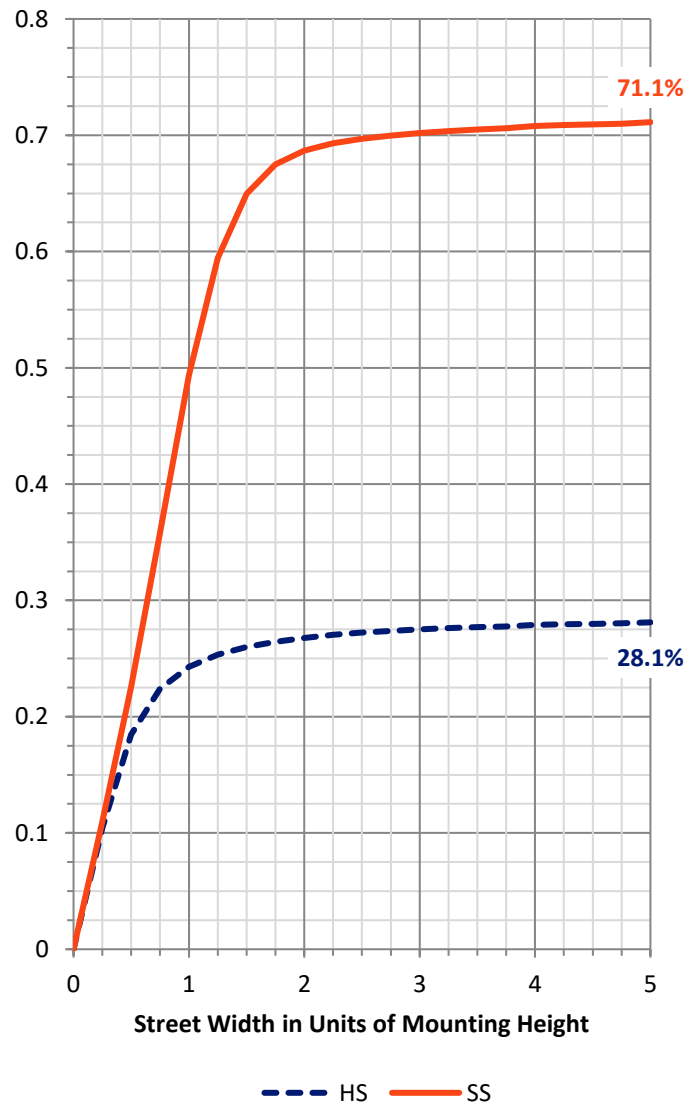
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1601.0	0.0	1601.0
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	4007.0	0.0	4007.0
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	5608.0	0.0	5608.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.7	1.2
10°-20°	205.6	3.7
20°-30°	361.0	6.4
30°-40°	608.5	10.9
40°-50°	1066.0	19.0
50°-60°	1377.7	24.6
60°-70°	1192.6	21.3
70°-80°	619.1	11.0
80°-90°	107.9	1.9
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°	5608.0	100.0
0°-180°	5608.0	100.0



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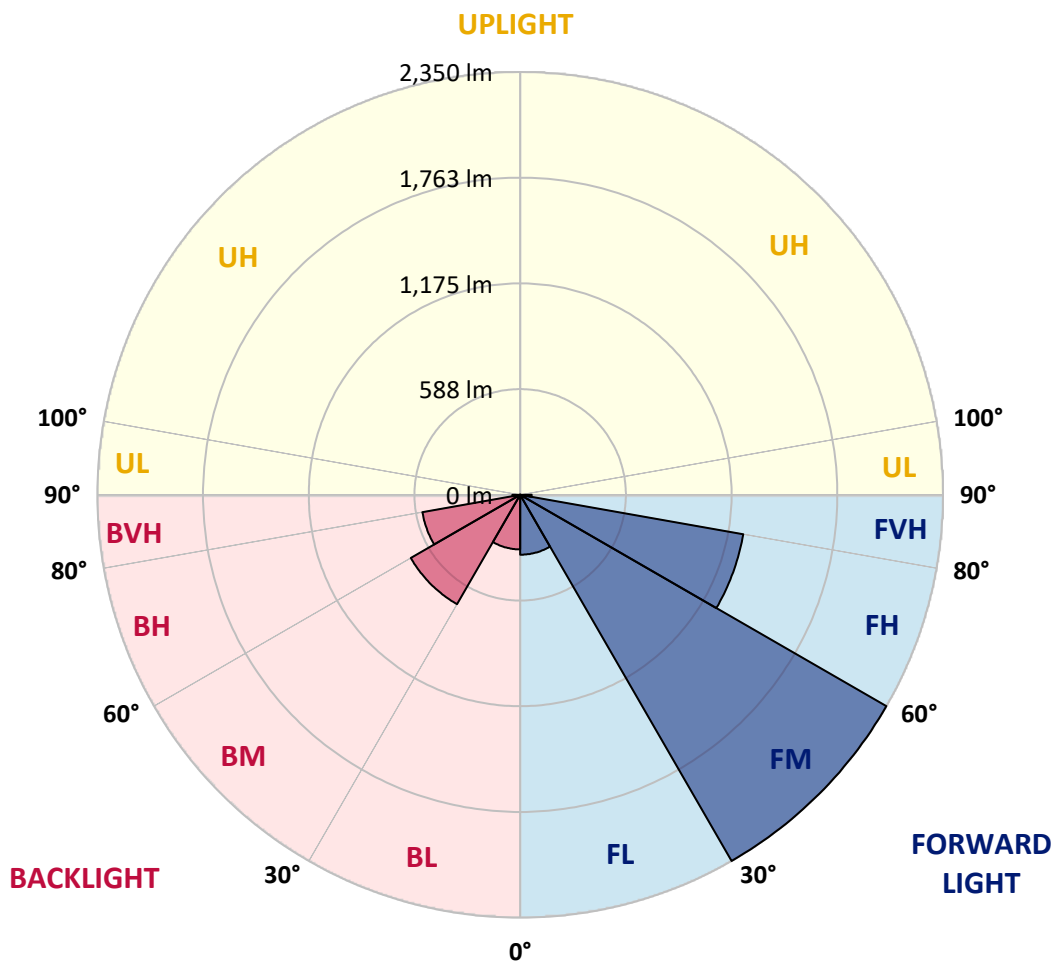
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	332.9	5.9			
FM	(30°-60°)	2350.4	41.9			
FH	(60°-80°)	1259.4	22.5			G1/1800
FVH	(80°-90°)	64.3	1.1			G1/100
BL	(0°-30°)	303.3	5.4	B1/500		
BM	(30°-60°)	701.8	12.5	B1/1000		
BH	(60°-80°)	552.3	9.8	B2/1000		G2/1000
BVH	(80°-90°)	43.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3
2.5°	716.9	714.8	718.5	720.1	719.6	722.7	722.7	723.2	723.2	725.9	728.5
5°	695.9	694.9	698.6	701.2	703.3	708.0	711.2	712.7	714.3	718.0	724.3
7.5°	676.0	674.4	679.7	681.8	684.9	691.7	699.1	703.3	705.4	713.3	722.2
10°	659.7	659.2	663.4	665.5	669.2	679.1	689.6	698.6	700.1	710.6	719.0
12.5°	651.9	650.8	655.5	658.1	664.4	676.5	688.6	699.6	702.2	714.3	721.7
15°	658.1	659.2	663.4	663.9	671.3	683.9	697.5	708.5	711.2	723.2	728.5
17.5°	688.1	687.5	690.2	689.1	691.7	698.0	712.7	721.7	724.8	733.7	737.9
20°	742.1	740.5	742.6	735.8	724.3	721.1	730.1	740.0	741.1	746.3	743.7
22.5°	824.5	826.1	821.4	804.1	776.2	763.1	757.3	760.5	764.2	763.6	755.8
25°	932.1	937.4	928.4	898.0	851.3	820.8	799.9	795.1	797.8	790.4	778.3
27.5°	1073.3	1077.5	1058.1	1010.8	947.9	902.7	860.7	844.5	844.5	828.7	806.7
30°	1228.7	1231.3	1200.3	1140.5	1067.5	1000.3	938.4	906.9	904.3	873.3	838.7
32.5°	1417.6	1410.2	1373.5	1299.5	1207.7	1115.3	1035.5	987.7	982.5	935.8	891.7
35°	1661.6	1661.6	1585.5	1501.0	1389.3	1271.7	1166.7	1092.7	1087.5	1034.5	977.3
37.5°	1926.7	1925.6	1856.9	1740.4	1606.5	1462.7	1322.6	1230.2	1218.2	1161.5	1097.4
40°	2190.7	2181.8	2126.1	2015.4	1872.6	1708.4	1515.2	1407.6	1401.8	1321.0	1240.7
42.5°	2383.8	2375.4	2349.2	2275.2	2181.2	2062.6	1765.6	1620.2	1611.8	1510.0	1411.8
45°	2490.4	2478.3	2474.6	2475.7	2486.2	2485.6	2074.7	1871.6	1842.2	1724.1	1593.4
47.5°	2466.2	2437.9	2475.7	2572.8	2736.0	2843.1	2434.7	2170.2	2115.6	1946.6	1787.1
50°	2271.5	2257.9	2338.7	2536.6	2871.9	3123.3	2831.0	2480.4	2403.2	2157.1	1970.2
52.5°	1929.8	1956.1	2055.8	2337.1	2847.3	3292.8	3191.0	2802.6	2695.6	2357.6	2129.3
55°	1536.2	1569.3	1709.9	2008.0	2619.0	3294.9	3450.8	3114.9	3019.4	2564.9	2292.0
57.5°	1117.9	1164.6	1340.4	1613.9	2218.5	3069.8	3578.9	3407.3	3298.1	2769.1	2451.0
60°	702.2	735.3	926.9	1243.9	1695.8	2572.8	3546.9	3641.3	3551.1	2961.7	2632.6
62.5°	452.4	468.2	551.1	888.0	1182.5	1886.8	3310.2	3775.7	3736.9	3137.5	2769.6
63°	414.6	428.3	499.1	820.8	1096.4	1738.3	3230.4	3782.5	3759.4	3170.6	2801.6
65°	296.5	311.2	348.0	564.2	809.3	1166.2	2768.0	3719.0	3744.7	3225.7	2845.2
67.5°	234.1	238.8	255.6	342.7	574.2	662.3	1862.7	3339.6	3452.4	3166.9	2780.6
70°	209.4	213.1	232.0	262.9	434.6	429.3	971.5	2685.1	2918.6	2966.4	2617.9
72.5°	182.6	185.3	208.4	247.7	331.7	328.0	422.5	1805.4	2089.4	2599.0	2392.7
75°	151.2	153.8	173.2	219.9	280.8	259.3	264.5	943.7	1197.7	2037.4	2098.3
77.5°	124.4	126.0	142.2	176.9	247.2	200.0	204.7	396.8	582.0	1388.7	1656.9
80°	90.3	90.8	106.0	134.4	188.9	180.5	152.2	216.2	264.0	761.0	1042.3
82.5°	63.0	63.5	79.3	93.9	130.2	180.0	110.7	144.9	158.5	350.6	464.0
85°	44.1	43.0	54.1	61.9	82.4	109.2	84.5	92.9	98.1	151.7	124.9
87.5°	19.4	18.9	30.4	33.1	41.5	50.4	67.2	48.8	52.0	73.5	39.4
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°	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3	734.3
2.5°	729.0	731.1	734.3	739.0	742.6	744.2	747.4	747.9	752.6	748.4	748.9
5°	728.0	730.6	737.4	745.8	751.6	755.8	763.6	766.3	771.0	768.9	768.4
7.5°	726.4	731.1	741.1	753.1	762.1	768.9	776.2	781.0	785.7	784.6	783.6
10°	724.3	730.1	744.2	756.3	768.9	776.2	781.5	782.0	783.6	782.5	779.9
12.5°	725.9	732.2	748.4	760.5	773.6	778.9	777.3	769.4	762.6	756.8	755.8
15°	731.1	738.4	753.7	764.7	775.2	772.0	762.6	745.3	732.7	725.3	725.9
17.5°	736.4	742.6	754.2	763.1	768.4	758.9	744.2	729.5	723.8	718.0	716.9
20°	741.1	742.1	749.5	757.3	756.8	749.5	735.8	718.0	706.4	697.0	697.5
22.5°	748.4	744.2	744.7	749.5	755.2	748.4	716.4	685.4	668.1	657.1	656.6
25°	765.2	756.3	747.9	750.5	772.6	729.0	674.9	634.5	619.3	609.3	610.4
27.5°	788.3	776.2	759.4	773.6	785.7	690.7	615.6	574.2	563.7	553.2	555.8
30°	813.5	796.2	775.7	823.5	771.0	629.8	542.2	504.4	494.9	485.0	487.1
32.5°	858.6	832.9	806.2	883.3	736.9	555.8	465.0	430.9	424.6	418.3	418.8
35°	933.7	903.2	874.4	929.0	692.8	478.7	395.7	371.6	366.3	359.0	359.0
37.5°	1044.4	996.7	981.5	953.1	632.4	406.8	344.8	328.5	317.5	307.6	307.6
40°	1173.0	1116.3	1104.3	960.5	553.7	346.9	309.1	295.0	280.3	265.6	266.6
42.5°	1329.4	1252.8	1225.0	950.5	458.2	308.6	283.9	267.7	253.5	240.9	238.8
45°	1505.8	1408.7	1338.3	921.6	371.6	285.0	267.7	248.2	230.4	219.4	217.3
47.5°	1685.8	1577.7	1438.6	863.9	310.7	268.2	256.6	229.4	216.8	209.4	208.4
50°	1857.9	1745.1	1521.5	773.1	275.5	256.1	240.4	220.4	209.9	203.6	203.1
52.5°	2010.7	1904.1	1591.3	679.1	251.9	246.1	233.0	216.2	205.2	199.4	198.4
55°	2156.0	2065.2	1660.6	595.2	231.5	229.4	229.4	212.0	200.0	194.7	193.7
57.5°	2315.6	2248.4	1730.4	533.8	213.1	217.3	224.6	207.3	194.2	189.5	188.9
60°	2499.8	2460.5	1803.9	479.7	196.8	204.2	217.8	201.0	187.4	183.7	182.6
62.5°	2688.2	2689.3	1867.4	414.6	183.2	194.2	209.9	195.2	181.1	178.4	177.9
63°	2721.3	2730.7	1876.3	400.5	180.0	192.1	207.8	193.1	179.5	176.9	176.3
65°	2802.6	2844.1	1883.7	340.6	168.5	184.2	200.0	186.3	172.7	172.1	171.1
67.5°	2783.2	2850.9	1838.0	267.1	155.4	173.2	188.9	176.3	164.3	164.3	162.2
70°	2638.4	2682.5	1697.9	206.3	145.4	161.7	175.8	165.8	153.3	154.3	150.1
72.5°	2416.4	2368.1	1396.6	161.1	133.3	148.5	160.6	152.2	141.2	140.1	135.4
75°	2091.0	1931.9	1000.3	130.2	118.6	131.2	143.8	137.5	127.5	121.8	120.7
77.5°	1593.4	1371.4	599.4	110.2	106.0	116.5	124.4	119.7	111.8	105.0	105.5
80°	948.9	790.9	270.3	93.4	91.8	99.7	106.0	102.3	97.1	88.7	86.6
82.5°	384.2	306.0	121.2	75.6	77.7	83.4	89.2	86.1	81.9	79.8	67.7
85°	99.7	96.0	70.9	56.7	59.8	62.5	70.3	70.3	66.7	54.6	50.4
87.5°	28.3	37.8	39.4	35.7	40.4	40.9	48.8	48.8	49.9	33.6	30.4
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)