

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: P397583

Luminaire Tested: **ARCH-S-PA1-100-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397583  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5911 lumens  
Efficiency: N/A  
Efficacy: 61.6 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): 96  
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

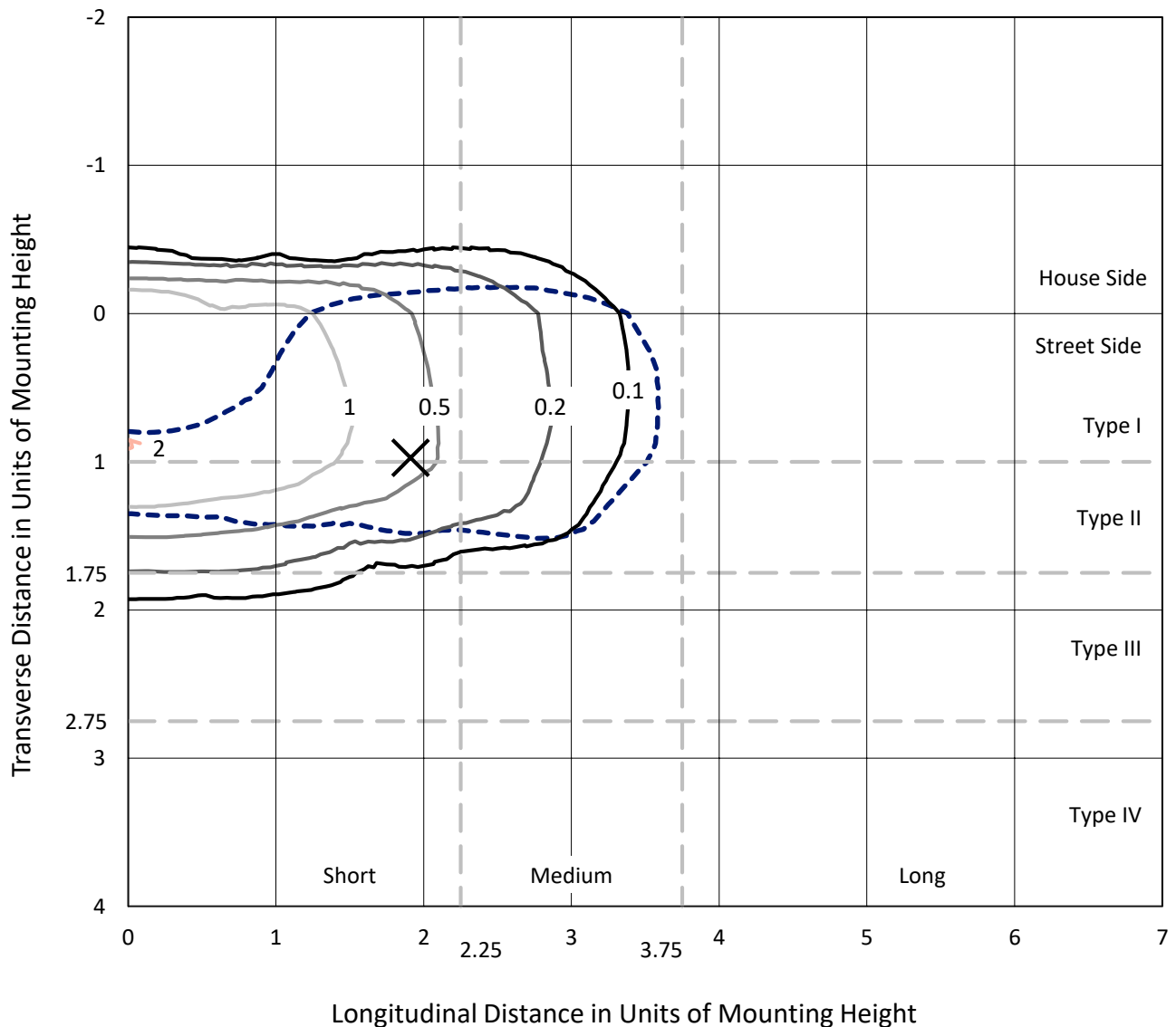


REPORT NUMBER: P397583

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

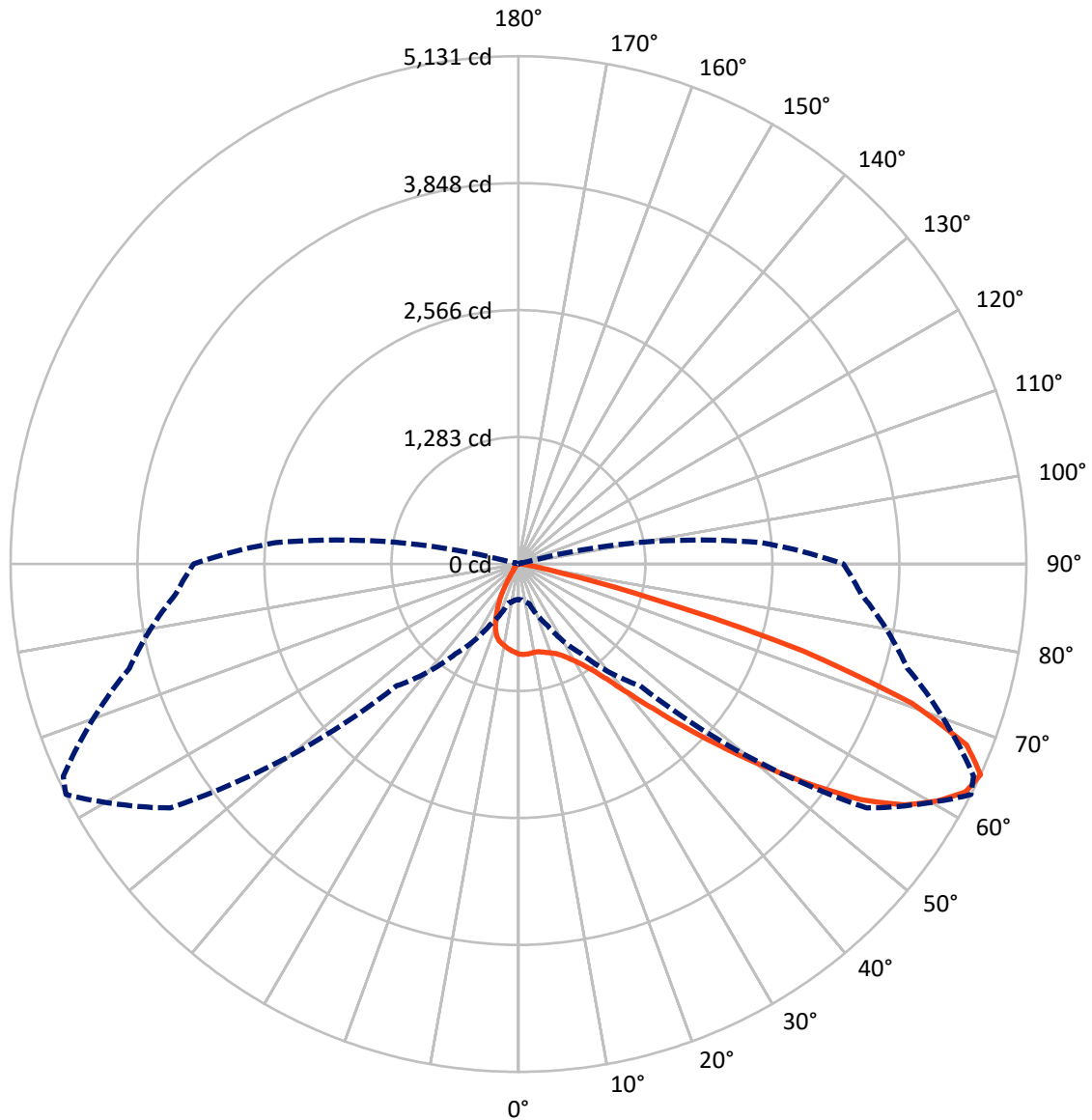


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P397583

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P397583

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T2U-HSS

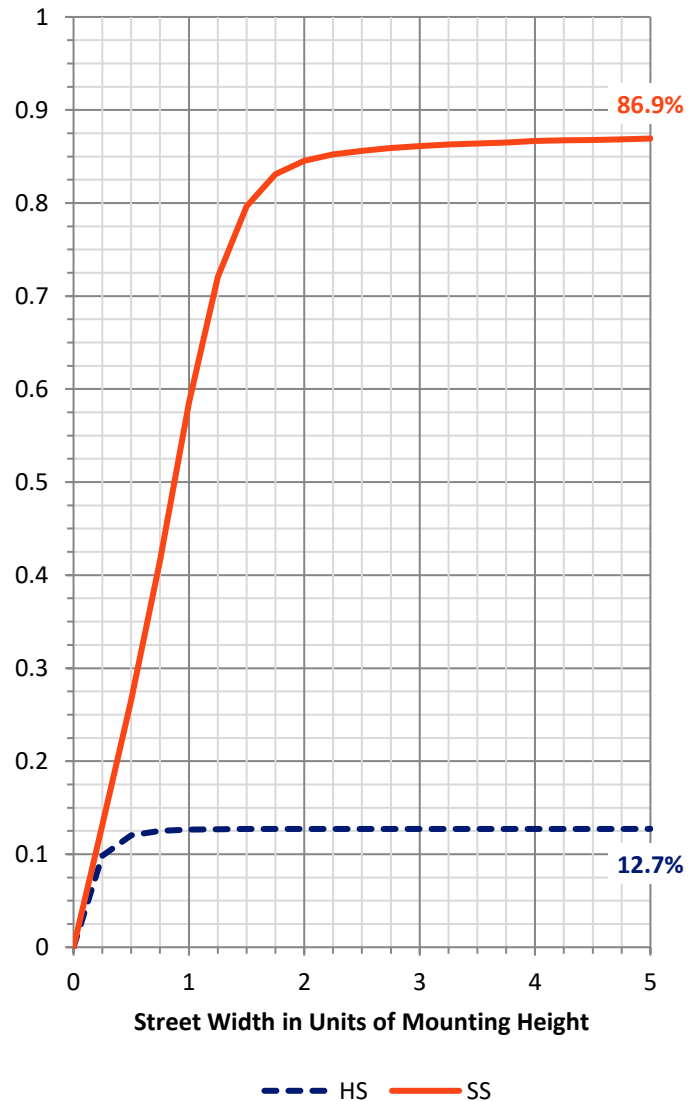
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	760.7	0.0	760.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	5150.3	0.0	5150.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	5911.0	0.0	5911.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.1	1.4
10°-20°	205.0	3.5
20°-30°	303.8	5.1
30°-40°	564.1	9.5
40°-50°	1195.0	20.2
50°-60°	1652.4	28.0
60°-70°	1322.8	22.4
70°-80°	549.6	9.3
80°-90°	35.3	0.6
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°	5911.0	100.0
0°-180°	5911.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P397583

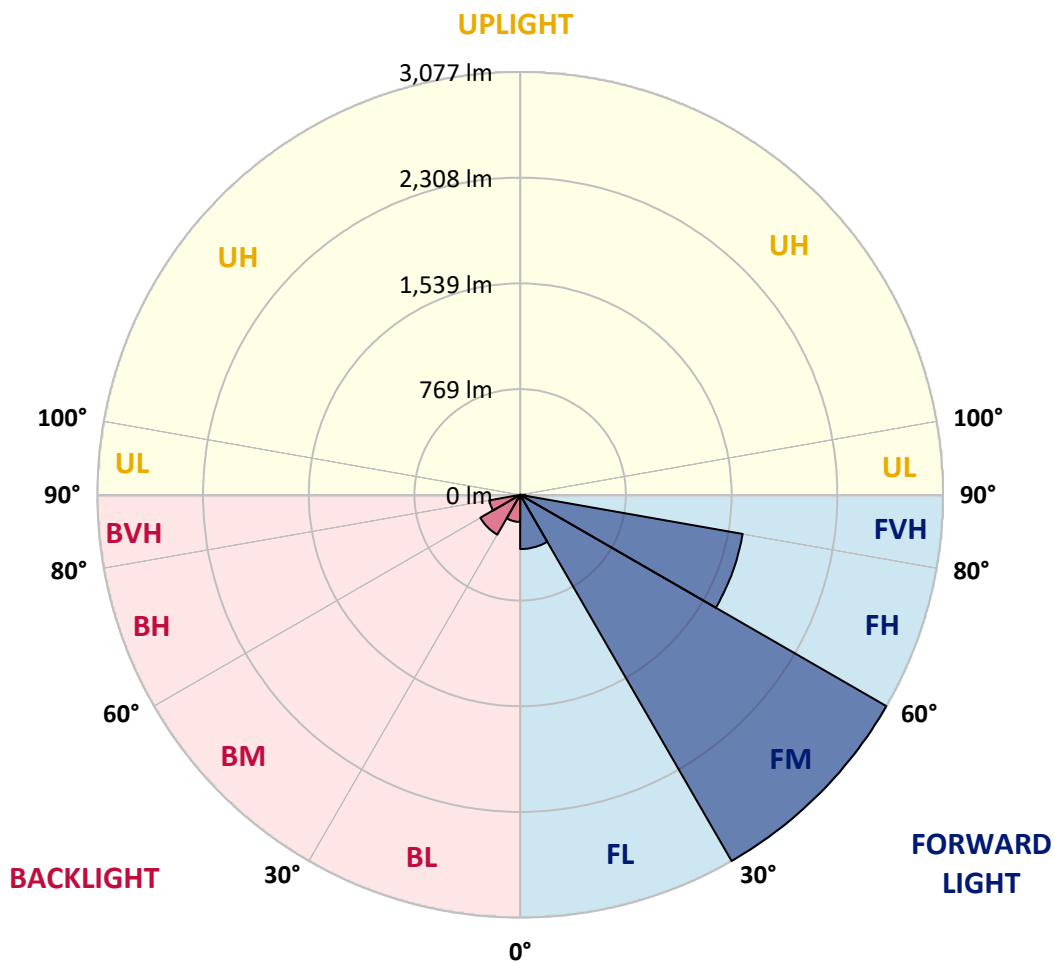
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.7	6.7			
FM	(30°-60°)	3077.3	52.1			
FH	(60°-80°)	1644.6	27.8			G1/1800
FVH	(80°-90°)	33.7	0.6			G1/100
BL	(0°-30°)	197.2	3.3	B1/500		
BM	(30°-60°)	334.2	5.7	B1/1000		
BH	(60°-80°)	227.8	3.9	B1/500		G1/500
BVH	(80°-90°)	1.6	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





REPORT NUMBER: P397583

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6
2.5°	926.2	924.0	921.8	920.6	920.6	919.5	915.1	913.9	911.7	909.5	907.2
5°	917.3	913.9	912.8	913.9	915.1	917.3	915.1	915.1	912.8	910.6	906.1
7.5°	895.0	892.7	893.9	897.2	898.3	906.1	907.2	910.6	910.6	908.4	905.0
10°	868.2	867.1	867.1	872.7	878.2	889.4	897.2	906.1	907.2	907.2	901.7
12.5°	848.1	847.0	850.3	857.0	868.2	882.7	896.1	909.5	911.7	912.8	903.9
15°	835.8	835.8	840.3	853.7	869.3	889.4	905.0	922.9	925.1	924.0	911.7
17.5°	824.7	825.8	834.7	857.0	874.9	901.7	920.6	940.7	941.8	940.7	920.6
20°	820.2	822.4	835.8	864.8	884.9	915.1	939.6	959.7	960.8	956.3	929.6
22.5°	832.5	833.6	850.3	881.6	900.5	934.0	965.3	984.2	985.4	978.7	943.0
25°	874.9	874.9	889.4	916.2	932.9	966.4	999.9	1022.2	1022.2	1014.4	973.1
27.5°	974.2	965.3	961.9	969.7	975.3	1011.0	1046.7	1074.6	1073.5	1062.4	1012.1
30°	1166.1	1143.8	1108.1	1067.9	1047.9	1072.4	1105.9	1141.6	1140.5	1122.6	1060.1
32.5°	1488.6	1456.3	1371.5	1265.5	1179.5	1151.6	1182.9	1221.9	1223.1	1201.8	1137.1
35°	1940.6	1889.3	1737.5	1590.2	1393.8	1287.8	1296.7	1339.1	1352.5	1341.3	1266.6
37.5°	2375.8	2328.9	2183.9	1979.6	1712.9	1496.5	1458.5	1495.3	1511.0	1511.0	1431.7
40°	2814.4	2759.7	2631.3	2426.0	2144.8	1822.3	1686.2	1716.3	1733.0	1736.4	1632.6
42.5°	3165.9	3130.2	3032.0	2872.4	2609.0	2393.7	2014.2	1997.5	2013.1	2000.8	1865.8
45°	3409.1	3381.2	3313.2	3252.9	3124.6	3016.3	2452.8	2340.1	2350.1	2307.7	2128.1
47.5°	3459.4	3428.1	3413.6	3497.3	3588.8	3615.6	2991.8	2747.4	2737.4	2643.6	2400.3
50°	3240.6	3244.0	3297.6	3536.4	3918.0	4159.0	3616.7	3207.2	3170.3	2961.7	2653.7
52.5°	2768.6	2822.2	2957.2	3344.4	4018.4	4554.1	4241.6	3694.8	3637.9	3270.8	2843.4
55°	2166.0	2235.2	2457.3	2902.5	3808.6	4730.4	4768.3	4201.4	4072.0	3502.9	2990.7
57.5°	1610.3	1631.5	1890.4	2296.6	3312.1	4557.4	5038.4	4592.0	4425.7	3688.1	3136.9
60°	1003.2	1016.6	1290.0	1748.7	2508.6	3918.0	5038.4	4861.0	4702.5	3854.4	3270.8
62.5°	623.8	628.3	730.9	1198.5	1705.1	2905.9	4829.7	5069.6	4942.4	3973.8	3385.7
65°	359.3	363.8	411.8	677.4	1109.2	1739.7	4296.3	5131.0	5074.1	4068.7	3475.0
67.5°	262.2	264.5	283.4	380.5	725.3	893.9	3227.2	4884.4	4955.8	4115.5	3472.8
70°	227.6	231.0	255.5	296.8	523.4	549.0	1642.6	4218.2	4417.9	4048.6	3369.0
72.5°	175.2	179.7	216.5	279.0	383.9	395.0	594.8	3001.8	3304.2	3630.1	3084.4
75°	120.5	125.0	161.8	229.9	316.9	295.7	327.0	1381.5	1743.1	2434.9	2347.9
77.5°	77.0	78.1	101.5	167.4	273.4	209.8	224.3	450.8	632.7	1101.4	1108.1
80°	51.3	52.4	62.5	108.2	187.5	194.2	138.4	208.7	228.8	321.4	223.2
82.5°	31.2	31.2	42.4	68.1	113.8	160.7	90.4	109.4	117.2	123.9	58.0
85°	12.3	12.3	25.7	44.6	71.4	74.8	56.9	63.6	67.0	72.5	26.8
87.5°	3.3	3.3	14.5	24.6	31.2	34.6	34.6	31.2	33.5	41.3	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397583

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6
2.5°	906.1	902.8	898.3	893.9	889.4	886.0	882.7	882.7	880.5	877.1	874.9
5°	903.9	898.3	888.3	880.5	868.2	859.3	852.6	847.0	843.6	835.8	834.7
7.5°	900.5	893.9	879.3	863.7	843.6	828.0	812.4	801.2	790.1	781.1	778.9
10°	895.0	887.2	866.0	843.6	815.7	786.7	749.9	707.5	668.4	646.1	639.4
12.5°	895.0	884.9	857.0	826.9	786.7	715.3	621.6	527.8	455.3	422.9	414.0
15°	900.5	887.2	850.3	809.0	734.3	589.2	437.4	313.6	234.3	209.8	204.2
17.5°	906.1	887.2	840.3	784.5	638.3	427.4	248.9	165.2	139.5	133.9	133.9
20°	908.4	884.9	826.9	738.7	510.0	265.6	148.4	123.9	113.8	110.5	110.5
22.5°	917.3	886.0	816.9	672.9	370.5	156.2	117.2	103.8	93.7	90.4	90.4
25°	939.6	899.4	819.1	589.2	237.7	118.3	99.3	85.9	75.9	71.4	71.4
27.5°	975.3	929.6	831.4	492.1	149.5	101.5	83.7	69.2	61.4	56.9	56.9
30°	1015.5	963.0	836.9	380.5	111.6	85.9	68.1	54.7	49.1	45.8	44.6
32.5°	1085.8	1021.1	832.5	261.1	91.5	72.5	54.7	43.5	39.1	37.9	37.9
35°	1198.5	1122.6	823.6	164.0	75.9	58.0	43.5	35.7	32.4	31.2	30.1
37.5°	1351.4	1271.0	796.8	108.2	62.5	45.8	35.7	30.1	26.8	25.7	25.7
40°	1537.7	1440.7	745.4	82.6	53.6	36.8	30.1	25.7	23.4	22.3	22.3
42.5°	1750.9	1629.2	664.0	71.4	44.6	31.2	25.7	21.2	20.1	19.0	19.0
45°	1984.1	1826.8	551.3	63.6	37.9	25.7	21.2	19.0	16.7	16.7	15.6
47.5°	2231.8	2025.4	424.1	55.8	32.4	22.3	19.0	15.6	14.5	13.4	13.4
50°	2470.7	2202.8	298.0	48.0	26.8	19.0	15.6	13.4	12.3	11.2	11.2
52.5°	2639.2	2310.0	210.9	41.3	22.3	16.7	12.3	10.0	8.9	8.9	8.9
55°	2774.2	2376.9	147.3	34.6	19.0	14.5	10.0	7.8	7.8	6.7	6.7
57.5°	2901.4	2420.4	108.2	29.0	15.6	11.2	7.8	5.6	5.6	4.5	4.5
60°	3033.1	2443.9	82.6	23.4	13.4	8.9	5.6	4.5	3.3	3.3	3.3
62.5°	3165.9	2458.4	63.6	19.0	11.2	6.7	4.5	3.3	2.2	1.1	1.1
65°	3281.9	2462.8	49.1	14.5	8.9	4.5	3.3	1.1	0.0	0.0	0.0
67.5°	3316.5	2411.5	37.9	11.2	6.7	3.3	2.2	0.0	0.0	0.0	0.0
70°	3222.8	2275.4	29.0	8.9	5.6	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2860.1	1908.2	22.3	5.6	4.5	2.2	1.1	0.0	0.0	0.0	0.0
75°	2046.6	1017.7	15.6	4.5	3.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	941.8	393.9	11.2	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
80°	184.1	98.2	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.4	16.7	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.5	5.6	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.2	1.1	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)