

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: P397540

Luminaire Tested: **ARCH-S-PA1-100-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397540  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7069 lumens  
Efficiency: N/A  
Efficacy: 73.6 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

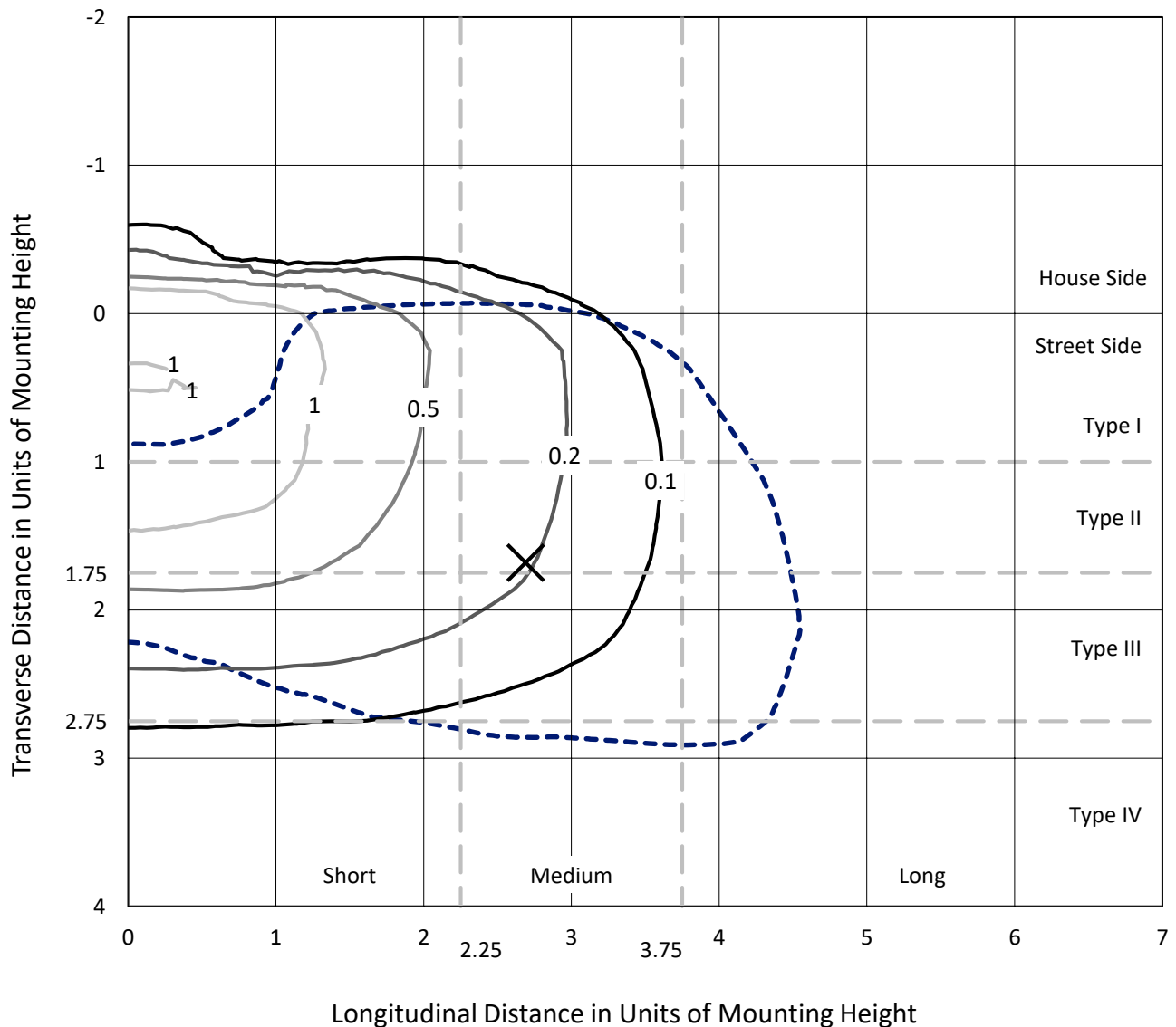
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

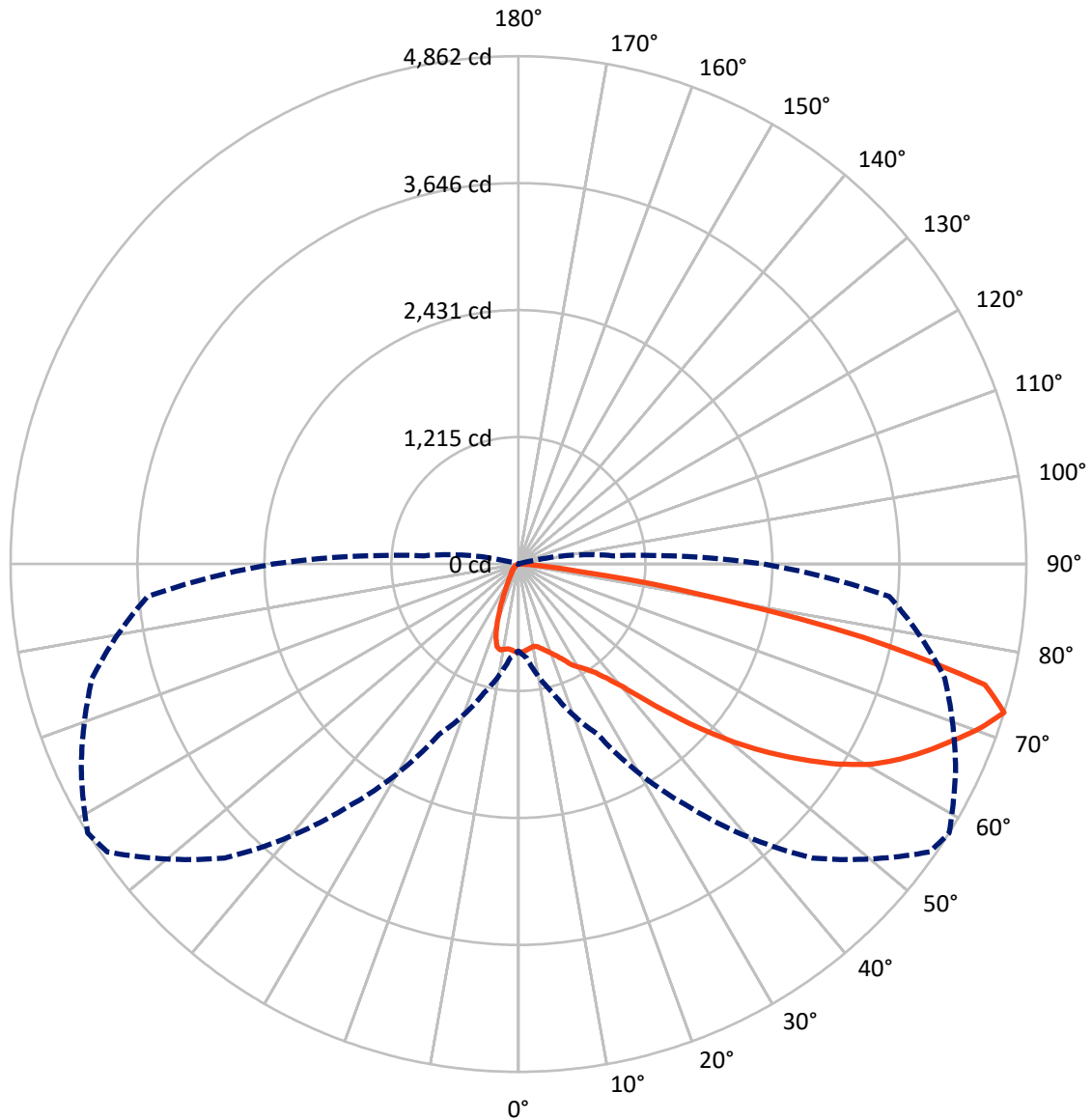
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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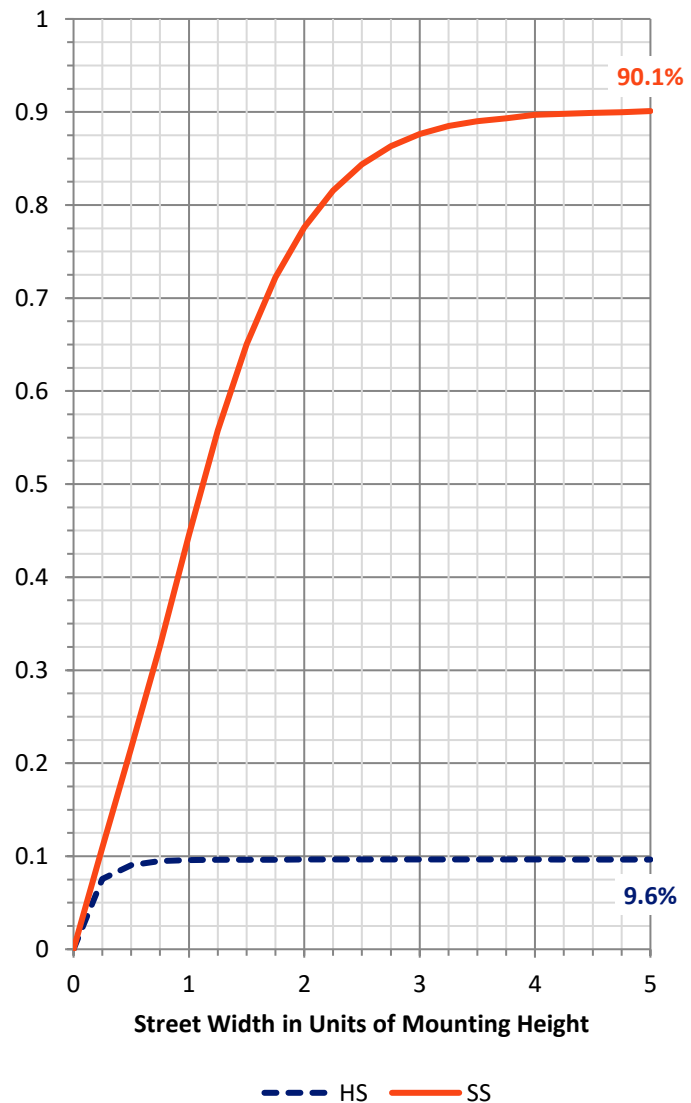
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	687.4	0.0	687.4
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	6381.6	0.0	6381.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	7069.0	0.0	7069.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.9	1.1
10°-20°	202.8	2.9
20°-30°	318.5	4.5
30°-40°	549.3	7.8
40°-50°	1045.1	14.8
50°-60°	1655.1	23.4
60°-70°	1931.3	27.3
70°-80°	1209.6	17.1
80°-90°	79.4	1.1
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°	7069.0	100.0
0°-180°	7069.0	100.0



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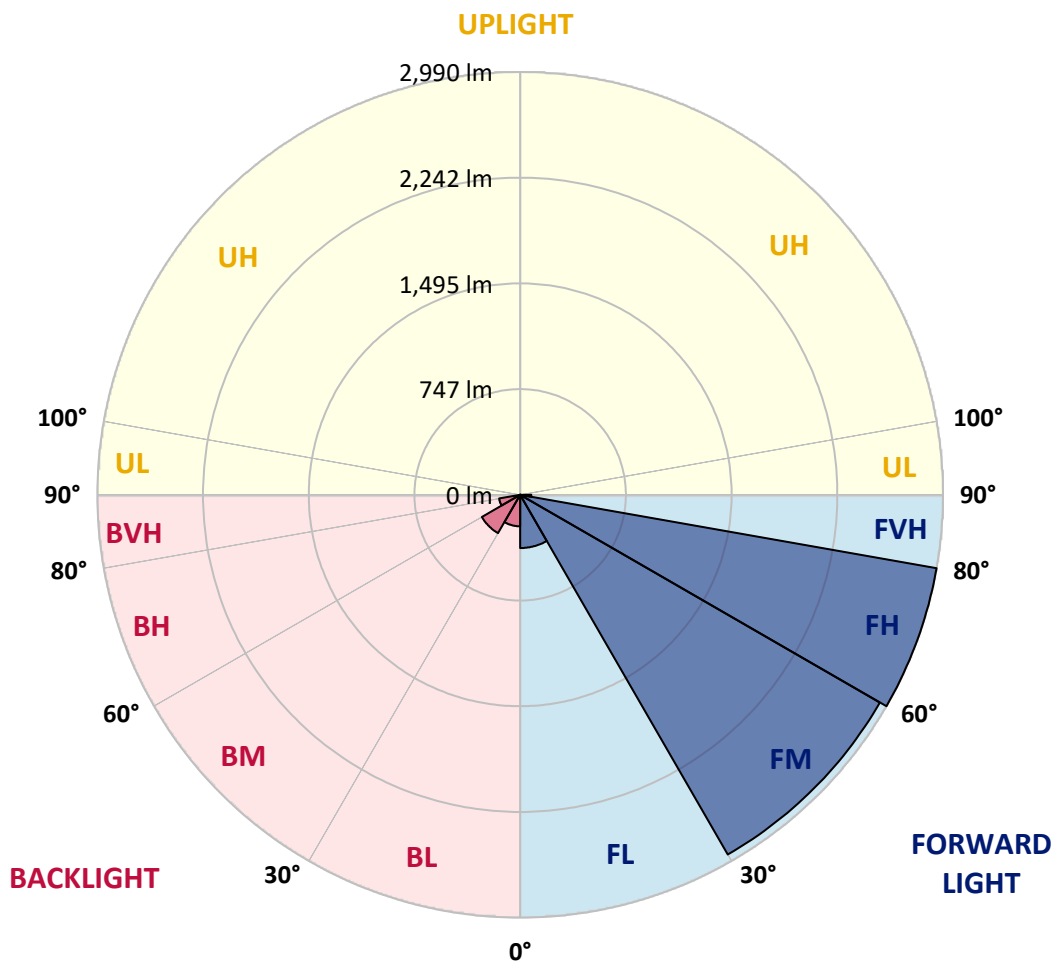
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	376.5	5.3			
FM	(30°-60°)	2936.8	41.5			
FH	(60°-80°)	2989.7	42.3			G2/5000
FVH	(80°-90°)	78.6	1.1			G1/100
BL	(0°-30°)	222.6	3.1	B1/500		
BM	(30°-60°)	312.8	4.4	B1/1000		
BH	(60°-80°)	151.3	2.1	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	45°	55°	58°	65°	75°	85°
0°	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2
2.5°	844.4	840.7	839.4	838.1	839.4	840.7	836.9	840.7	838.1	839.4	841.9
5°	814.1	810.3	809.0	810.3	814.1	820.4	823.0	826.7	826.7	830.5	831.8
7.5°	780.0	777.4	776.2	778.7	786.3	800.2	807.8	812.8	817.9	825.5	833.1
10°	761.0	759.7	758.5	762.3	769.9	782.5	792.6	800.2	819.2	840.7	854.6
12.5°	748.4	748.4	750.9	758.5	768.6	778.7	802.7	812.8	841.9	874.8	893.7
15°	738.3	738.3	742.0	756.0	769.9	793.9	829.3	840.7	874.8	915.2	940.5
17.5°	730.7	733.2	735.7	749.6	776.2	816.6	858.4	874.8	916.5	960.7	988.6
20°	731.9	734.5	735.7	749.6	787.6	843.2	896.3	915.2	963.3	1010.0	1037.9
22.5°	739.5	743.3	744.6	763.5	807.8	871.0	939.3	960.7	1012.6	1061.9	1083.4
25°	771.1	773.7	766.1	782.5	836.9	914.0	994.9	1017.6	1069.5	1115.0	1132.7
27.5°	878.6	881.1	839.4	820.4	859.6	949.4	1063.1	1094.7	1159.2	1189.6	1192.1
30°	1111.2	1113.7	1031.5	941.8	914.0	979.7	1101.1	1145.3	1228.7	1262.9	1247.7
32.5°	1410.8	1408.3	1295.7	1163.0	1042.9	1032.8	1155.4	1202.2	1293.2	1326.1	1314.7
35°	1711.6	1715.4	1619.4	1419.6	1247.7	1132.7	1225.0	1279.3	1389.3	1436.1	1415.8
37.5°	1917.7	1943.0	1901.3	1685.1	1499.3	1317.2	1337.5	1395.6	1533.4	1596.6	1553.6
40°	2208.4	2202.1	2101.0	1941.7	1777.4	1590.3	1519.5	1547.3	1705.3	1790.0	1723.0
42.5°	2599.1	2586.4	2414.5	2259.0	2075.7	1922.8	1778.6	1773.6	1902.5	2001.1	1903.8
45°	2953.0	2934.1	2816.5	2666.1	2465.1	2289.4	2094.7	2050.4	2140.2	2223.6	2109.8
47.5°	3234.9	3203.3	3119.9	3040.3	2991.0	2717.9	2425.9	2358.9	2404.4	2466.3	2305.8
50°	3568.7	3481.4	3360.1	3312.0	3414.4	3203.3	2744.4	2680.0	2677.4	2712.8	2508.1
52.5°	3720.4	3562.3	3494.1	3534.5	3715.3	3654.6	3088.3	2996.0	2959.3	2963.1	2696.4
55°	3537.1	3519.4	3556.0	3682.4	3918.8	3883.4	3418.2	3304.5	3250.1	3181.8	2877.2
57.5°	3328.5	3382.8	3528.2	3769.7	4176.7	4122.4	3743.1	3614.2	3514.3	3357.6	3078.2
60°	3136.3	3191.9	3432.1	3789.9	4318.3	4352.4	4013.6	3891.0	3743.1	3537.1	3299.4
62.5°	2844.3	2887.3	3224.8	3760.8	4256.4	4486.4	4202.0	4109.7	3971.9	3707.7	3553.5
65°	2515.6	2543.4	2877.2	3528.2	4135.0	4471.3	4357.5	4305.7	4171.7	3886.0	3805.1
67.5°	2155.4	2188.2	2466.3	3109.8	3897.3	4400.5	4504.1	4499.1	4346.1	4083.2	3987.1
70°	1740.7	1743.2	1973.3	2578.8	3482.7	4258.9	4686.2	4697.5	4513.0	4231.1	3994.7
72.5°	833.1	901.3	1279.3	1800.1	2830.4	3980.8	4805.0	4861.9	4617.9	4226.0	3563.6
75°	190.9	197.2	372.9	855.8	1659.8	3055.4	4507.9	4614.1	4362.5	3654.6	2510.6
77.5°	69.5	73.3	104.9	250.3	638.4	1578.9	3226.1	3381.6	3224.8	2362.7	1187.0
80°	46.8	45.5	54.4	111.2	293.3	447.5	1649.7	1742.0	1590.3	806.5	284.4
82.5°	24.0	25.3	37.9	61.9	197.2	155.5	551.2	599.2	493.0	161.8	53.1
85°	11.4	11.4	21.5	39.2	83.4	54.4	122.6	147.9	132.7	70.8	17.7
87.5°	11.4	11.4	20.2	25.3	43.0	22.8	30.3	37.9	35.4	37.9	6.3
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°	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2	848.2
2.5°	841.9	840.7	839.4	841.9	840.7	843.2	843.2	845.7	845.7	843.2	841.9
5°	830.5	828.0	825.5	825.5	824.2	826.7	834.3	840.7	841.9	838.1	836.9
7.5°	831.8	831.8	829.3	824.2	815.4	815.4	815.4	823.0	826.7	824.2	823.0
10°	854.6	855.8	849.5	838.1	823.0	809.0	782.5	743.3	706.7	696.5	692.7
12.5°	893.7	895.0	882.4	862.1	830.5	748.4	647.2	553.7	481.6	461.4	457.6
15°	940.5	941.8	919.0	886.2	790.1	599.2	448.8	342.6	279.4	264.2	262.9
17.5°	988.6	986.0	951.9	888.7	670.0	424.8	273.1	218.7	202.3	198.5	199.7
20°	1035.3	1027.7	981.0	841.9	515.8	278.1	199.7	187.1	183.3	180.8	180.8
22.5°	1078.3	1063.1	1005.0	749.6	361.5	199.7	178.2	175.7	170.7	166.9	165.6
25°	1121.3	1099.8	1020.2	629.5	242.7	174.5	168.1	163.1	156.8	151.7	150.4
27.5°	1173.1	1142.8	1012.6	477.8	182.0	161.8	156.8	149.2	140.3	132.7	130.2
30°	1222.4	1188.3	969.6	329.9	155.5	149.2	141.6	130.2	118.8	110.0	107.5
32.5°	1284.4	1245.2	892.5	216.2	135.3	130.2	122.6	108.7	93.5	83.4	80.9
35°	1372.9	1328.6	793.9	151.7	118.8	110.0	99.9	84.7	68.3	60.7	59.4
37.5°	1496.7	1437.3	670.0	122.6	104.9	92.3	77.1	61.9	50.6	44.2	43.0
40°	1648.4	1557.4	532.2	108.7	93.5	77.1	58.2	44.2	36.7	31.6	31.6
42.5°	1812.8	1669.9	391.9	99.9	82.2	63.2	43.0	31.6	26.5	24.0	22.8
45°	1982.2	1769.8	264.2	92.3	72.1	48.0	30.3	21.5	17.7	17.7	16.4
47.5°	2157.9	1836.8	170.7	83.4	60.7	35.4	20.2	15.2	12.6	12.6	12.6
50°	2332.3	1872.2	121.4	75.8	49.3	24.0	15.2	11.4	10.1	10.1	10.1
52.5°	2458.7	1849.4	97.3	65.7	37.9	17.7	11.4	8.8	7.6	7.6	7.6
55°	2568.7	1810.2	84.7	56.9	27.8	12.6	8.8	7.6	6.3	6.3	6.3
57.5°	2681.2	1759.7	75.8	48.0	20.2	8.8	6.3	5.1	5.1	5.1	5.1
60°	2783.6	1673.7	65.7	37.9	13.9	6.3	5.1	3.8	3.8	3.8	3.8
62.5°	2883.5	1600.4	56.9	29.1	10.1	5.1	2.5	2.5	1.3	1.3	1.3
65°	2940.4	1501.8	45.5	19.0	6.3	3.8	1.3	1.3	0.0	0.0	0.0
67.5°	2922.7	1384.2	31.6	11.4	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2800.1	1226.2	19.0	6.3	3.8	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	2345.0	907.7	11.4	5.1	2.5	1.3	0.0	0.0	0.0	0.0	0.0
75°	1566.3	417.2	6.3	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	716.8	125.1	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	144.1	32.9	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.3	6.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	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)