

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: P397915

Luminaire Tested: **ARCH-S-PA1-60-740-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-740-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9083 lumens  
Efficiency: N/A  
Efficacy: 141.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

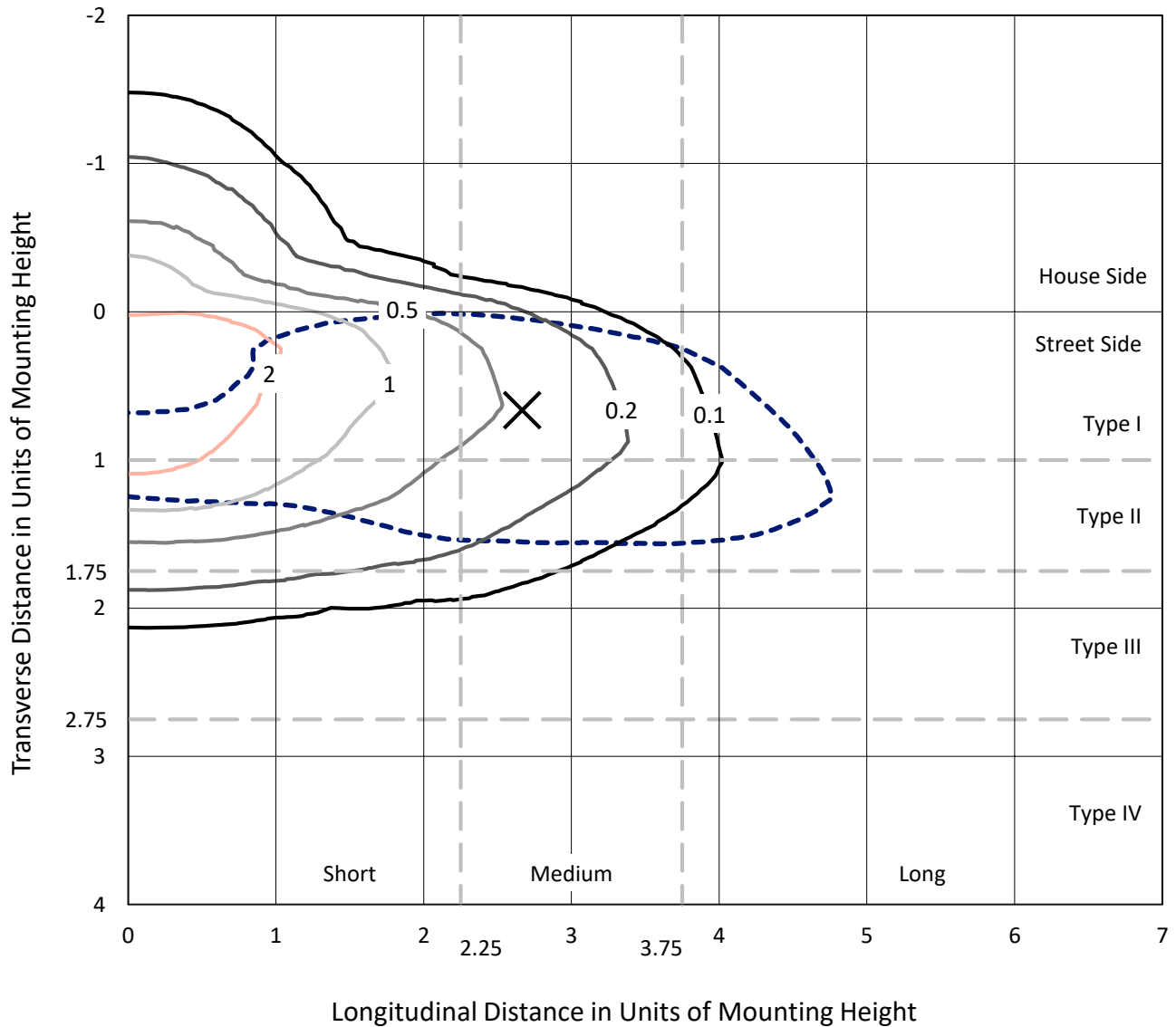
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

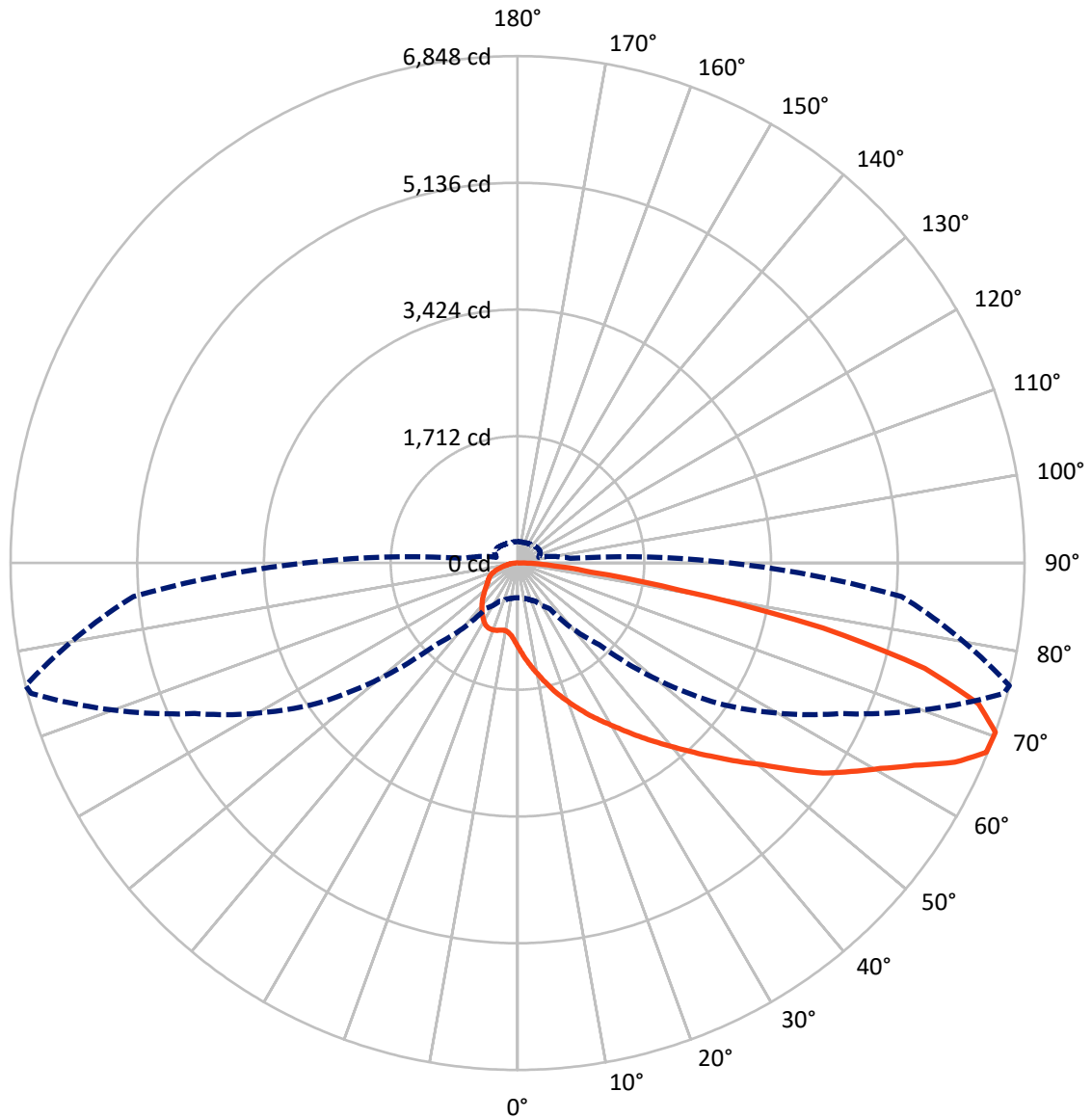


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1482.9	0.0	1482.9
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	7600.1	0.0	7600.1
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	9083.0	0.0	9083.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.0	1.3
10°-20°	401.1	4.4
20°-30°	717.7	7.9
30°-40°	1160.9	12.8
40°-50°	1679.4	18.5
50°-60°	1922.2	21.2
60°-70°	1768.2	19.5
70°-80°	1093.4	12.0
80°-90°	222.0	2.4
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°	9083.0	100.0
0°-180°	9083.0	100.0

**Coefficient of Utilization**



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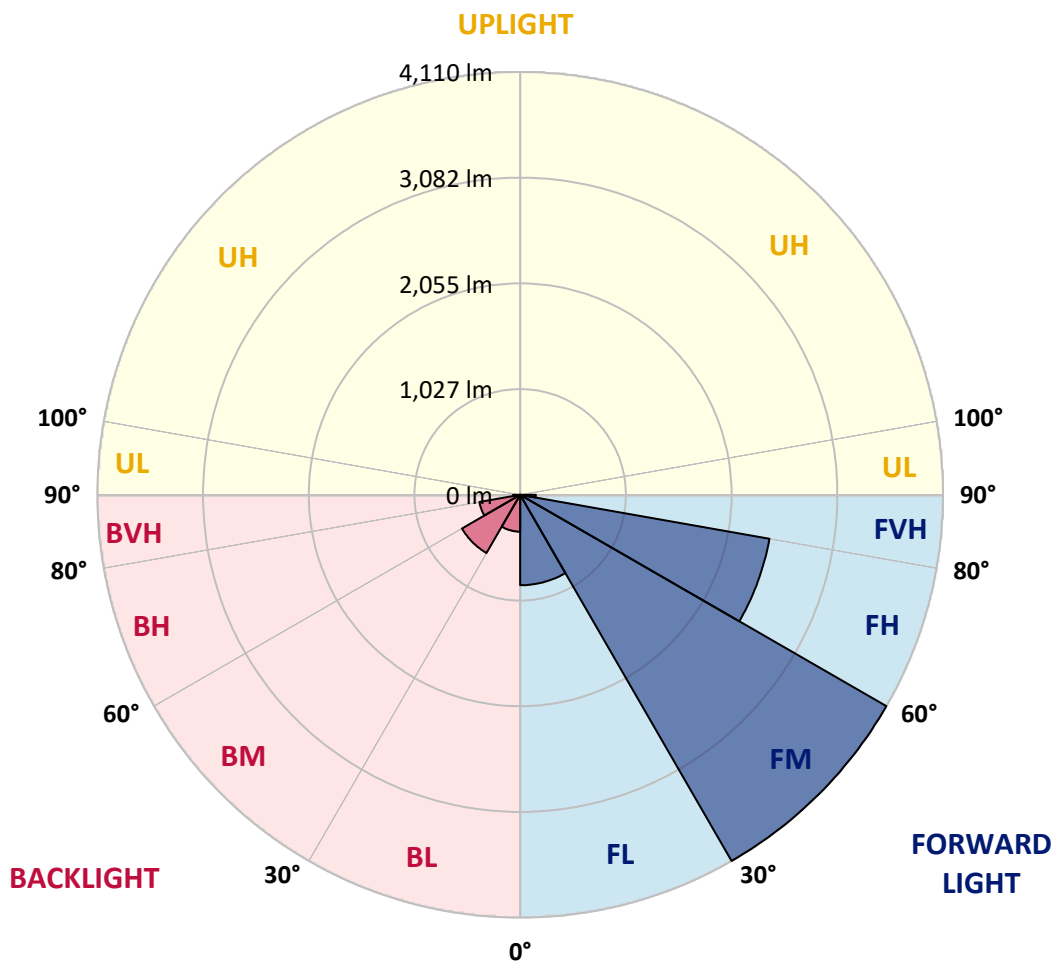
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	878.6	9.7			
FM (30°-60°)	4109.6	45.2			
FH (60°-80°)	2459.4	27.1			G2/5000
FVH (80°-90°)	152.4	1.7			G2/225
BL (0°-30°)	358.2	3.9	B1/500		
BM (30°-60°)	652.9	7.2	B1/1000		
BH (60°-80°)	402.2	4.4	B1/500		G1/500
BVH (80°-90°)	69.6	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9
2.5°	1447.6	1436.9	1435.7	1418.9	1403.4	1361.6	1331.7	1279.2	1226.6	1225.4	1172.9
5°	1673.3	1662.6	1656.6	1636.3	1610.0	1555.1	1501.4	1420.1	1330.6	1324.6	1225.4
7.5°	1826.2	1816.7	1804.7	1796.4	1771.3	1722.3	1656.6	1559.9	1436.9	1424.9	1286.4
10°	1928.9	1923.0	1920.6	1914.6	1899.1	1859.7	1796.4	1693.6	1543.2	1530.0	1350.9
12.5°	1973.1	1970.7	1981.5	1998.2	2004.2	1988.7	1927.8	1831.0	1660.2	1645.9	1428.5
15°	1921.8	1924.2	1951.6	2009.0	2069.9	2103.3	2067.5	1973.1	1792.8	1772.5	1519.3
17.5°	1897.9	1901.5	1920.6	1975.5	2061.5	2165.4	2182.2	2108.1	1920.6	1891.9	1614.8
20°	1939.7	1944.5	1958.8	2001.8	2061.5	2172.6	2259.8	2237.1	2046.0	2016.1	1706.8
22.5°	2046.0	2052.0	2050.8	2078.2	2118.9	2195.3	2302.8	2358.9	2177.4	2143.9	1802.3
25°	2272.9	2268.2	2227.5	2214.4	2225.2	2274.1	2360.1	2476.0	2314.7	2281.3	1902.7
27.5°	2581.1	2575.1	2501.1	2434.2	2374.5	2396.0	2441.3	2570.3	2454.5	2416.3	1998.2
30°	2910.7	2903.6	2817.6	2708.9	2576.3	2545.3	2539.3	2652.7	2595.4	2554.8	2099.7
32.5°	3232.0	3226.1	3134.1	3007.5	2824.7	2731.6	2674.2	2744.7	2755.5	2716.1	2210.8
35°	3524.7	3524.7	3445.8	3295.3	3088.7	2947.8	2853.4	2858.2	2939.4	2894.0	2337.4
37.5°	3785.0	3783.8	3697.8	3549.7	3351.5	3190.2	3073.2	2995.5	3115.0	3075.6	2470.0
40°	3991.7	3983.3	3920.0	3791.0	3591.5	3431.5	3313.2	3156.8	3310.9	3275.0	2610.9
42.5°	4142.2	4137.4	4094.4	3982.1	3792.2	3641.7	3560.5	3359.8	3533.0	3497.2	2775.8
45°	4200.7	4210.2	4210.2	4103.9	3953.4	3816.1	3780.3	3583.2	3773.1	3737.3	2952.5
47.5°	4106.3	4131.4	4182.8	4189.9	4057.4	3964.2	3976.1	3807.7	4020.3	4001.2	3146.0
50°	3811.3	3857.9	3970.2	4173.2	4099.2	4077.7	4143.4	4037.0	4285.5	4279.5	3381.3
52.5°	3050.5	3163.9	3513.9	3878.2	4070.5	4130.2	4309.4	4295.0	4627.1	4636.6	3688.3
55°	2339.8	2382.8	2787.7	3407.6	3894.9	4113.5	4420.4	4547.1	4997.3	5009.3	3970.2
57.5°	1891.9	1920.6	2141.5	2787.7	3494.8	4022.7	4507.6	4694.0	5281.6	5312.7	4221.0
60°	1499.0	1540.8	1688.9	2133.2	2934.6	3804.1	4568.6	4857.6	5587.4	5634.0	4520.8
62.5°	1114.4	1134.7	1274.4	1580.2	2323.1	3411.2	4536.3	5035.6	5962.4	6018.5	4881.5
65°	793.1	811.0	910.1	1123.9	1717.5	2879.7	4348.8	5168.1	6433.0	6490.3	5244.6
67.5°	593.6	600.8	656.9	785.9	1157.4	2237.1	3969.0	5145.4	6777.0	6828.3	5390.3
70°	469.4	471.8	499.3	568.5	752.5	1557.5	3303.7	4812.2	6802.1	6847.5	5206.4
72.5°	389.4	388.2	403.7	437.1	524.3	985.4	2447.3	4193.5	6479.6	6510.6	4692.8
75°	321.3	323.7	334.4	353.5	400.1	649.7	1586.2	3345.5	5716.4	5682.9	3937.9
77.5°	269.9	268.7	273.5	290.2	323.7	467.0	929.2	2417.5	4236.5	4219.8	2584.7
80°	217.4	219.8	226.9	241.3	272.3	355.9	549.4	1508.5	2272.9	2212.0	1235.0
82.5°	145.7	168.4	182.7	199.5	235.3	262.8	348.8	766.8	1016.4	1000.9	560.2
85°	69.3	92.0	136.2	155.3	191.1	164.8	236.5	365.5	508.8	502.8	201.9
87.5°	14.3	14.3	72.9	87.2	118.2	70.5	131.4	158.9	246.0	230.5	82.4
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°	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9	1135.9
2.5°	1141.8	1109.6	1045.1	993.7	941.2	911.3	874.3	856.4	852.8	843.2	850.4
5°	1162.1	1098.8	977.0	897.0	843.2	817.0	803.8	799.0	797.9	795.5	795.5
7.5°	1189.6	1092.9	934.0	852.8	818.2	809.8	813.4	820.5	821.7	824.1	822.9
10°	1223.1	1094.1	910.1	842.0	825.3	826.5	838.5	848.0	852.8	856.4	855.2
12.5°	1269.6	1108.4	906.5	849.2	842.0	846.8	858.8	868.3	873.1	874.3	874.3
15°	1330.6	1138.3	914.9	864.7	858.8	862.4	869.5	873.1	874.3	873.1	873.1
17.5°	1397.4	1174.1	926.8	874.3	864.7	861.2	858.8	855.2	848.0	843.2	843.2
20°	1461.9	1206.3	932.8	873.1	856.4	842.0	827.7	809.8	797.9	788.3	788.3
22.5°	1526.4	1236.2	932.8	860.0	833.7	806.2	776.4	747.7	729.8	717.8	717.8
25°	1594.5	1264.9	925.7	837.3	797.9	758.4	717.8	682.0	664.1	652.1	649.7
27.5°	1651.8	1281.6	906.5	805.0	753.7	703.5	656.9	619.9	606.8	596.0	596.0
30°	1712.8	1292.3	870.7	763.2	703.5	646.2	598.4	568.5	554.2	538.7	537.5
32.5°	1780.8	1299.5	830.1	719.0	652.1	591.2	550.6	526.7	495.7	479.0	476.6
35°	1859.7	1309.1	787.1	668.9	600.8	545.8	521.9	482.5	452.7	438.3	437.1
37.5°	1943.3	1316.2	740.5	624.7	554.2	516.0	492.1	445.5	419.2	397.7	395.3
40°	2031.7	1316.2	692.7	581.7	517.2	502.8	457.5	415.6	371.5	360.7	358.3
42.5°	2129.6	1313.8	645.0	539.9	482.5	473.0	437.1	393.0	370.3	360.7	358.3
45°	2233.5	1305.5	599.6	492.1	446.7	427.6	400.1	388.2	378.6	378.6	378.6
47.5°	2351.8	1298.3	548.2	449.1	420.4	398.9	378.6	371.5	370.3	373.8	377.4
50°	2503.4	1295.9	505.2	418.0	400.1	375.0	372.7	366.7	367.9	367.9	367.9
52.5°	2687.4	1274.4	464.6	395.3	379.8	350.0	357.1	363.1	365.5	364.3	363.1
55°	2822.4	1236.2	430.0	379.8	365.5	340.4	350.0	359.5	361.9	358.3	358.3
57.5°	2944.2	1182.4	402.5	367.9	355.9	334.4	345.2	354.7	352.3	351.2	350.0
60°	3083.9	1131.1	381.0	361.9	346.4	332.0	341.6	347.6	344.0	341.6	340.4
62.5°	3235.6	1080.9	365.5	361.9	339.2	330.8	338.0	340.4	333.2	330.8	330.8
65°	3306.1	1002.1	348.8	361.9	335.6	328.5	330.8	328.5	321.3	321.3	320.1
67.5°	3190.2	871.9	327.3	357.1	340.4	324.9	320.1	316.5	308.2	308.2	305.8
70°	2870.1	716.6	296.2	341.6	341.6	323.7	305.8	297.4	287.8	291.4	286.7
72.5°	2452.1	568.5	258.0	315.3	334.4	322.5	290.2	277.1	268.7	272.3	265.2
75°	1986.3	440.7	212.6	273.5	316.5	316.5	274.7	256.8	247.2	247.2	238.9
77.5°	1266.1	326.1	173.2	226.9	284.3	308.2	261.6	234.1	219.8	216.2	210.2
80°	627.1	229.3	142.1	180.4	242.5	289.0	252.0	207.8	187.5	180.4	169.6
82.5°	333.2	158.9	113.5	140.9	193.5	260.4	240.1	179.2	154.1	143.3	131.4
85°	149.3	97.9	90.8	107.5	146.9	213.8	216.2	146.9	118.2	140.9	103.9
87.5°	54.9	44.2	44.2	54.9	84.8	89.6	152.9	94.4	75.2	51.4	40.6
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)