

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: P397979

Luminaire Tested: **ARCH-S-PA1-70-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397979  
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-PA1-70-730-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 930mA 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: 6258 lumens  
Efficiency: N/A  
Efficacy: 84.6 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

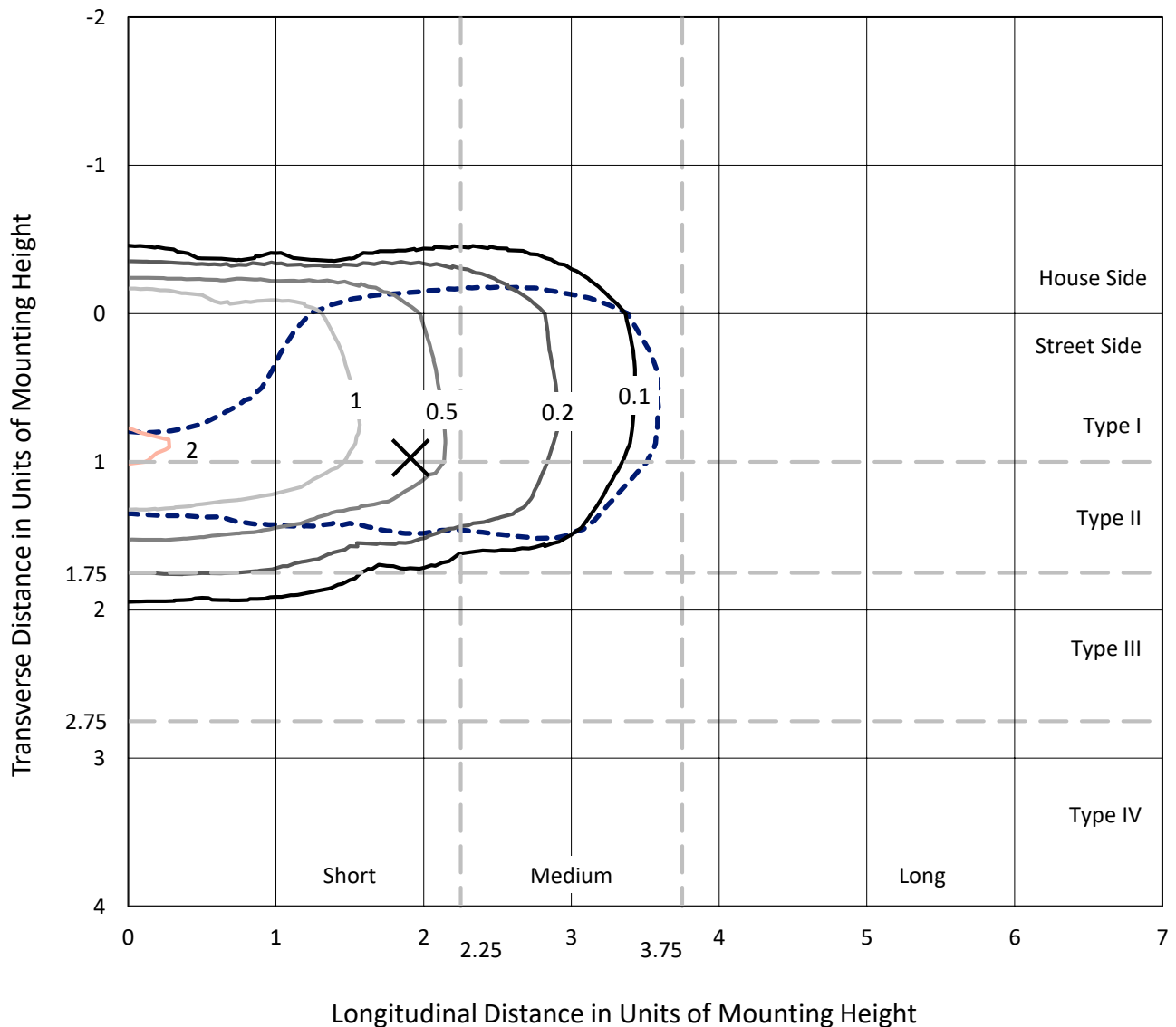
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397979  
 CATALOG NUMBER: ARCH-S-PA1-70-730-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

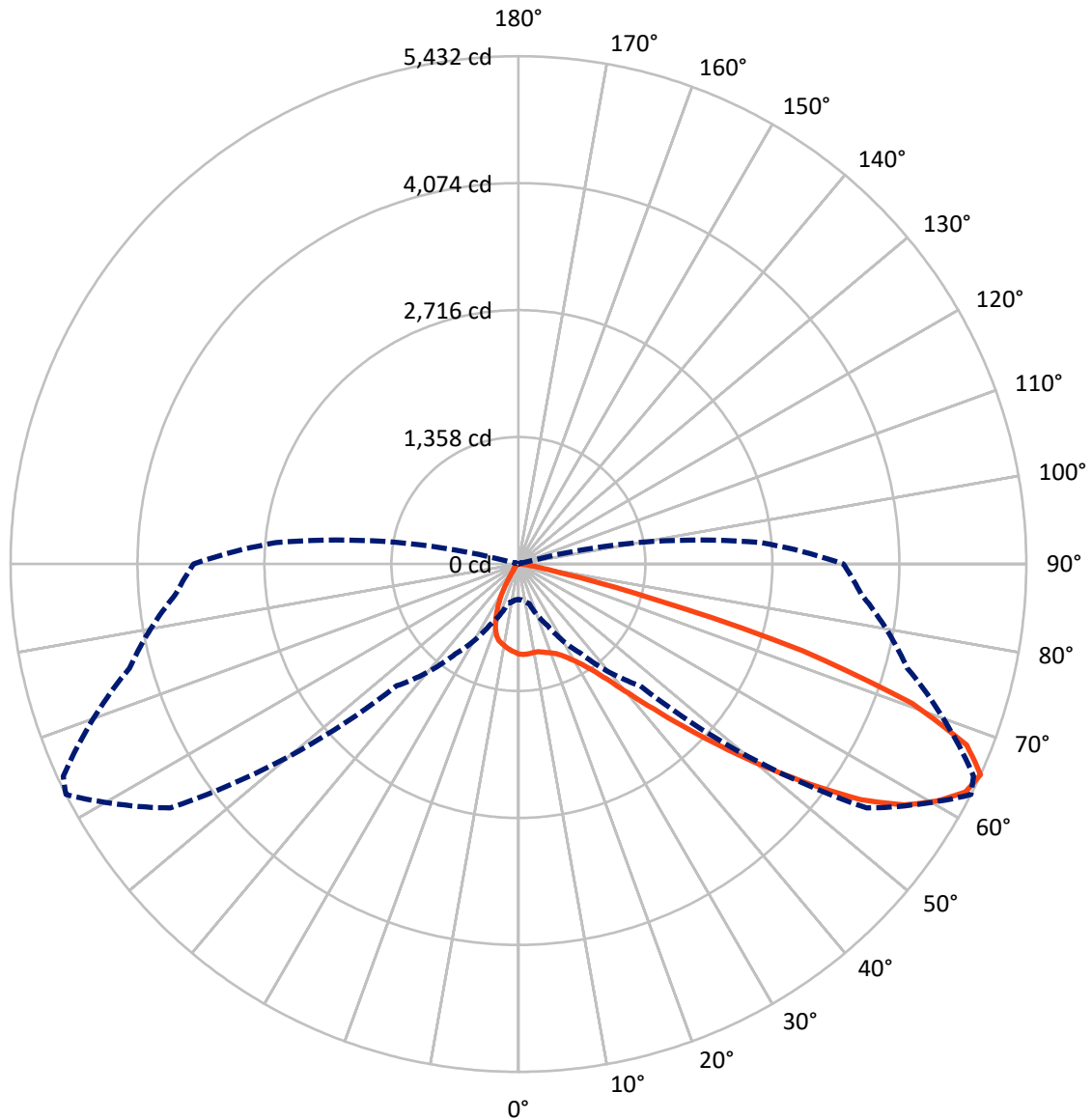
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P397979  
CATALOG NUMBER: ARCH-S-PA1-70-730-U-T2U-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397979

CATALOG NUMBER: ARCH-S-PA1-70-730-U-T2U-HSS

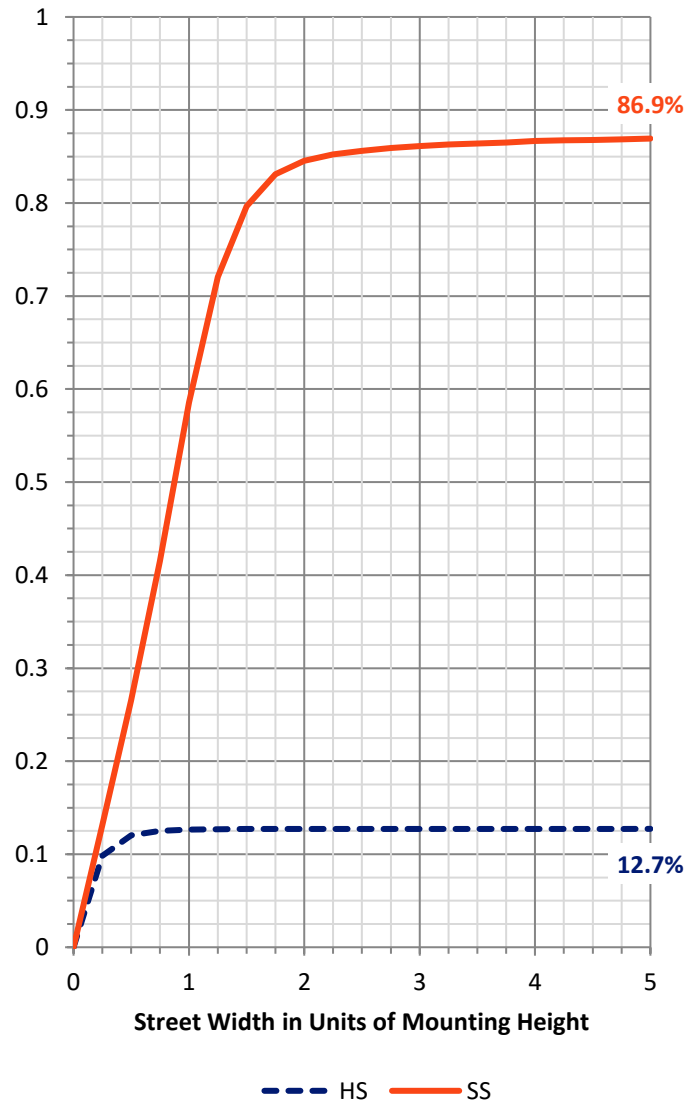
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	805.4	0.0	805.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	5452.6	0.0	5452.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	6258.0	0.0	6258.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	1.4
10°-20°	217.0	3.5
20°-30°	321.6	5.1
30°-40°	597.2	9.5
40°-50°	1265.2	20.2
50°-60°	1749.4	28.0
60°-70°	1400.4	22.4
70°-80°	581.8	9.3
80°-90°	37.4	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°	6258.0	100.0
0°-180°	6258.0	100.0



REPORT NUMBER: P397979

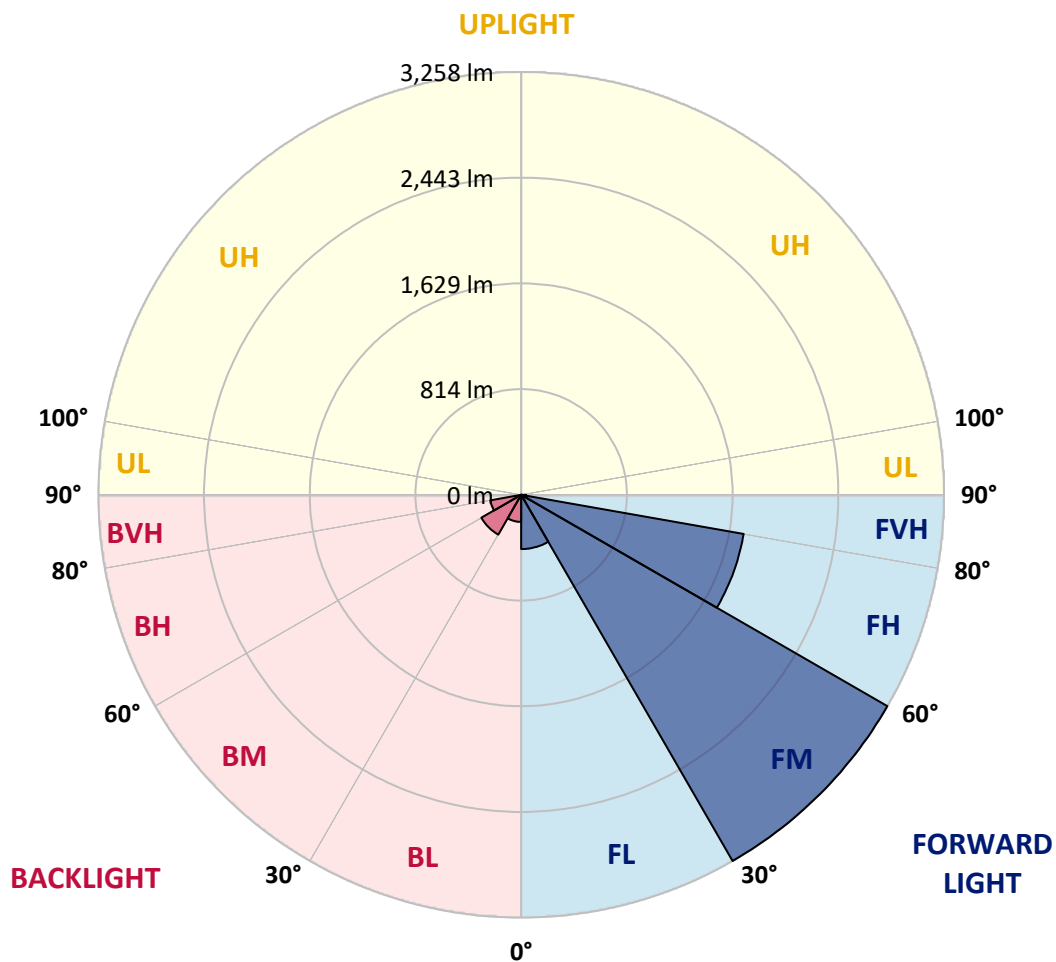
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	417.9	6.7			
FM (30°-60°)	3257.9	52.1			
FH (60°-80°)	1741.1	27.8			G1/1800
FVH (80°-90°)	35.7	0.6			G1/100
BL (0°-30°)	208.7	3.3	B1/500		
BM (30°-60°)	353.8	5.7	B1/1000		
BH (60°-80°)	241.2	3.9	B1/500		G1/500
BVH (80°-90°)	1.7	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: P397979

CATALOG NUMBER: ARCH-S-PA1-70-730-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0
2.5°	980.6	978.2	975.9	974.7	974.7	973.5	968.8	967.6	965.2	962.9	960.5
5°	971.1	967.6	966.4	967.6	968.8	971.1	968.8	968.8	966.4	964.0	959.3
7.5°	947.5	945.1	946.3	949.9	951.1	959.3	960.5	964.0	964.0	961.7	958.1
10°	919.2	918.0	918.0	923.9	929.8	941.6	949.9	959.3	960.5	960.5	954.6
12.5°	897.9	896.7	900.3	907.3	919.2	934.5	948.7	962.9	965.2	966.4	957.0
15°	884.9	884.9	889.6	903.8	920.3	941.6	958.1	977.0	979.4	978.2	965.2
17.5°	873.1	874.3	883.7	907.3	926.2	954.6	974.7	995.9	997.1	995.9	974.7
20°	868.4	870.7	884.9	915.6	936.9	968.8	994.8	1016.0	1017.2	1012.5	984.1
22.5°	881.3	882.5	900.3	933.3	953.4	988.9	1021.9	1042.0	1043.2	1036.1	998.3
25°	926.2	926.2	941.6	970.0	987.7	1023.1	1058.6	1082.2	1082.2	1073.9	1030.2
27.5°	1031.4	1021.9	1018.4	1026.7	1032.6	1070.4	1108.2	1137.7	1136.5	1124.7	1071.6
30°	1234.6	1211.0	1173.2	1130.6	1109.4	1135.4	1170.8	1208.6	1207.4	1188.5	1122.4
32.5°	1576.0	1541.8	1452.0	1339.7	1248.8	1219.2	1252.3	1293.7	1294.8	1272.4	1203.9
35°	2054.5	2000.2	1839.5	1683.5	1475.6	1363.4	1372.8	1417.7	1431.9	1420.1	1340.9
37.5°	2515.3	2465.6	2312.1	2095.9	1813.5	1584.3	1544.1	1583.1	1599.7	1599.7	1515.8
40°	2979.6	2921.7	2785.8	2568.4	2270.7	1929.3	1785.1	1817.0	1834.8	1838.3	1728.4
42.5°	3351.7	3313.9	3209.9	3041.0	2762.2	2534.2	2132.5	2114.8	2131.3	2118.3	1975.4
45°	3609.3	3579.7	3507.7	3443.9	3308.0	3193.4	2596.8	2477.5	2488.1	2443.2	2253.0
47.5°	3662.4	3629.4	3614.0	3702.6	3799.5	3827.8	3167.4	2908.7	2898.1	2798.8	2541.3
50°	3430.9	3434.4	3491.1	3744.0	4148.0	4403.2	3829.0	3395.4	3356.4	3135.5	2809.4
52.5°	2931.1	2987.8	3130.8	3540.8	4254.3	4821.4	4490.6	3911.7	3851.5	3462.8	3010.3
55°	2293.2	2366.4	2601.5	3072.9	4032.2	5008.1	5048.3	4448.1	4311.0	3708.5	3166.2
57.5°	1704.8	1727.3	2001.3	2431.4	3506.5	4825.0	5334.2	4861.6	4685.6	3904.6	3321.0
60°	1062.1	1076.3	1365.7	1851.3	2655.9	4148.0	5334.2	5146.3	4978.6	4080.7	3462.8
62.5°	660.4	665.1	773.8	1268.9	1805.2	3076.4	5113.2	5367.2	5232.6	4207.1	3584.5
65°	380.4	385.1	435.9	717.1	1174.3	1841.9	4548.5	5432.2	5372.0	4307.5	3679.0
67.5°	277.6	280.0	300.1	402.9	767.9	946.3	3416.7	5171.1	5246.7	4357.1	3676.6
70°	241.0	244.6	270.5	314.3	554.1	581.3	1739.1	4465.8	4677.3	4286.2	3566.7
72.5°	185.5	190.2	229.2	295.4	406.4	418.2	629.7	3178.1	3498.2	3843.2	3265.5
75°	127.6	132.3	171.3	243.4	335.5	313.1	346.2	1462.6	1845.4	2577.9	2485.7
77.5°	81.5	82.7	107.5	177.2	289.5	222.1	237.5	477.3	669.9	1166.1	1173.2
80°	54.3	55.5	66.2	114.6	198.5	205.6	146.5	220.9	242.2	340.3	236.3
82.5°	33.1	33.1	44.9	72.1	120.5	170.1	95.7	115.8	124.1	131.1	61.4
85°	13.0	13.0	27.2	47.3	75.6	79.2	60.3	67.3	70.9	76.8	28.4
87.5°	3.5	3.5	15.4	26.0	33.1	36.6	36.6	33.1	35.4	43.7	14.2
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: P397979

CATALOG NUMBER: ARCH-S-PA1-70-730-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0	964.0
2.5°	959.3	955.8	951.1	946.3	941.6	938.1	934.5	934.5	932.1	928.6	926.2
5°	957.0	951.1	940.4	932.1	919.2	909.7	902.6	896.7	893.2	884.9	883.7
7.5°	953.4	946.3	931.0	914.4	893.2	876.6	860.1	848.3	836.5	827.0	824.6
10°	947.5	939.2	916.8	893.2	863.6	832.9	793.9	749.0	707.7	684.0	677.0
12.5°	947.5	936.9	907.3	875.4	832.9	757.3	658.1	558.8	482.0	447.8	438.3
15°	953.4	939.2	900.3	856.5	777.4	623.8	463.1	332.0	248.1	222.1	216.2
17.5°	959.3	939.2	889.6	830.5	675.8	452.5	263.5	174.9	147.7	141.8	141.8
20°	961.7	936.9	875.4	782.1	539.9	281.2	157.1	131.1	120.5	117.0	117.0
22.5°	971.1	938.1	864.8	712.4	392.2	165.4	124.1	109.9	99.2	95.7	95.7
25°	994.8	952.2	867.2	623.8	251.6	125.2	105.1	91.0	80.3	75.6	75.6
27.5°	1032.6	984.1	880.2	521.0	158.3	107.5	88.6	73.2	65.0	60.3	60.3
30°	1075.1	1019.6	886.1	402.9	118.1	91.0	72.1	57.9	52.0	48.4	47.3
32.5°	1149.5	1081.0	881.3	276.5	96.9	76.8	57.9	46.1	41.4	40.2	40.2
35°	1268.9	1188.5	871.9	173.7	80.3	61.4	46.1	37.8	34.3	33.1	31.9
37.5°	1430.7	1345.7	843.5	114.6	66.2	48.4	37.8	31.9	28.4	27.2	27.2
40°	1628.0	1525.2	789.2	87.4	56.7	39.0	31.9	27.2	24.8	23.6	23.6
42.5°	1853.7	1724.9	703.0	75.6	47.3	33.1	27.2	22.4	21.3	20.1	20.1
45°	2100.6	1934.0	583.6	67.3	40.2	27.2	22.4	20.1	17.7	17.7	16.5
47.5°	2362.9	2144.3	448.9	59.1	34.3	23.6	20.1	16.5	15.4	14.2	14.2
50°	2615.7	2332.1	315.4	50.8	28.4	20.1	16.5	14.2	13.0	11.8	11.8
52.5°	2794.1	2445.6	223.3	43.7	23.6	17.7	13.0	10.6	9.5	9.5	9.5
55°	2937.0	2516.4	155.9	36.6	20.1	15.4	10.6	8.3	8.3	7.1	7.1
57.5°	3071.7	2562.5	114.6	30.7	16.5	11.8	8.3	5.9	5.9	4.7	4.7
60°	3211.1	2587.3	87.4	24.8	14.2	9.5	5.9	4.7	3.5	3.5	3.5
62.5°	3351.7	2602.7	67.3	20.1	11.8	7.1	4.7	3.5	2.4	1.2	1.2
65°	3474.6	2607.4	52.0	15.4	9.5	4.7	3.5	1.2	0.0	0.0	0.0
67.5°	3511.2	2553.1	40.2	11.8	7.1	3.5	2.4	0.0	0.0	0.0	0.0
70°	3412.0	2408.9	30.7	9.5	5.9	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	3028.0	2020.2	23.6	5.9	4.7	2.4	1.2	0.0	0.0	0.0	0.0
75°	2166.7	1077.5	16.5	4.7	3.5	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	997.1	417.0	11.8	3.5	2.4	1.2	0.0	0.0	0.0	0.0	0.0
80°	194.9	104.0	4.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.9	17.7	2.4	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	5.9	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.9	2.4	1.2	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)