

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: P397691

Luminaire Tested: **ARCH-S-PA1-30-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397691  
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-PA1-30-730-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 375mA 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: 2939 lumens  
Efficiency: N/A  
Efficacy: 94.8 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

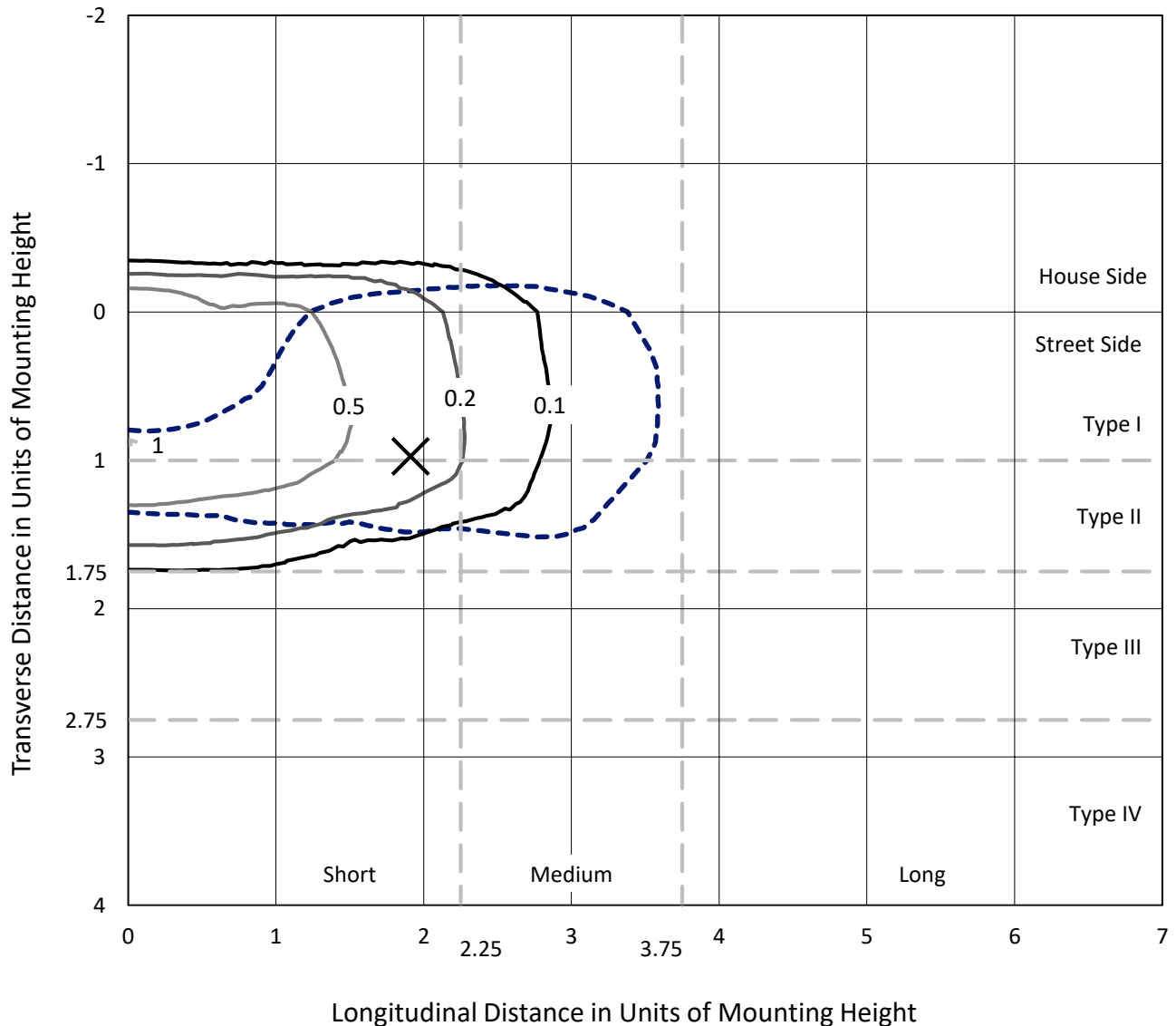
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397691  
 CATALOG NUMBER: ARCH-S-PA1-30-730-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

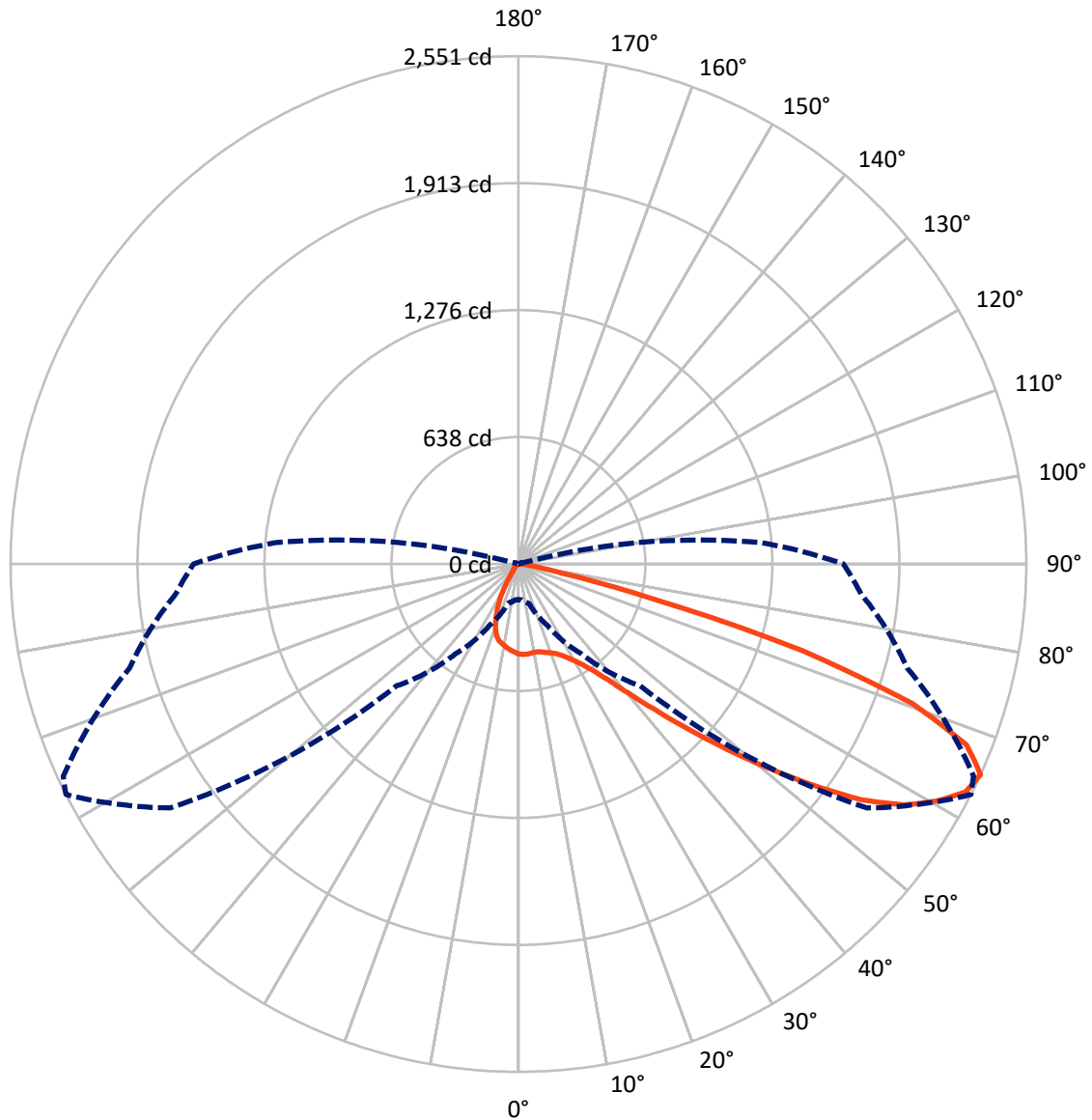


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P397691

CATALOG NUMBER: ARCH-S-PA1-30-730-U-T2U-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397691

CATALOG NUMBER: ARCH-S-PA1-30-730-U-T2U-HSS

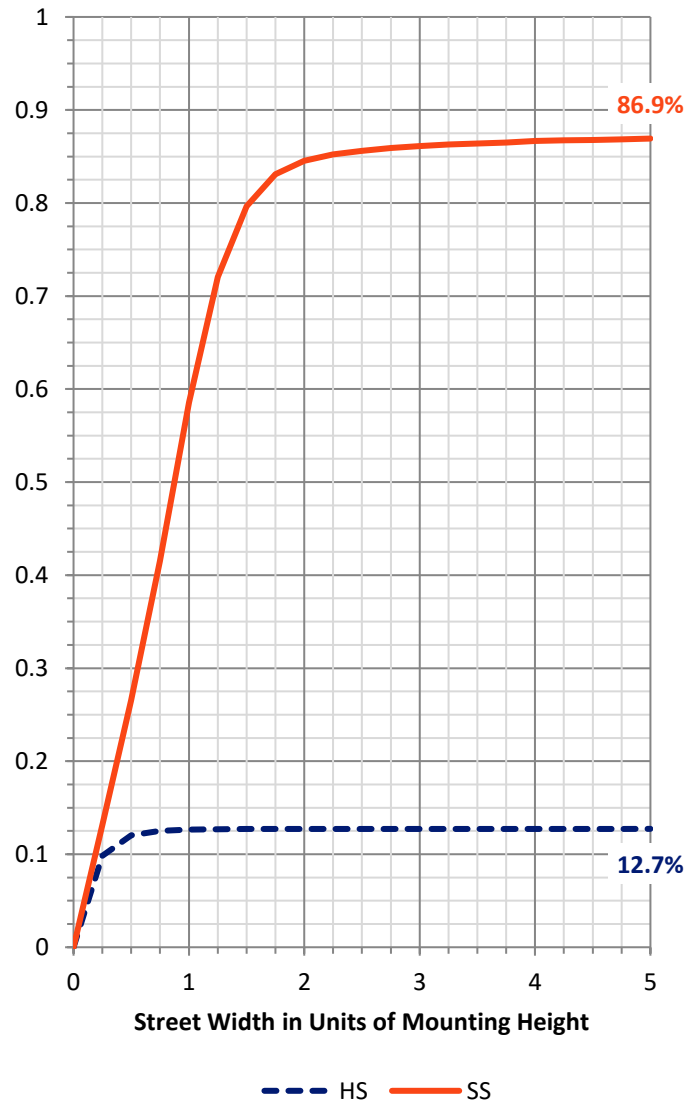
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	378.2	0.0	378.2
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	2560.8	0.0	2560.8
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	2939.0	0.0	2939.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.3	1.4
10°-20°	101.9	3.5
20°-30°	151.1	5.1
30°-40°	280.5	9.5
40°-50°	594.2	20.2
50°-60°	821.6	28.0
60°-70°	657.7	22.4
70°-80°	273.3	9.3
80°-90°	17.5	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°	2939.0	100.0
0°-180°	2939.0	100.0



REPORT NUMBER: P397691

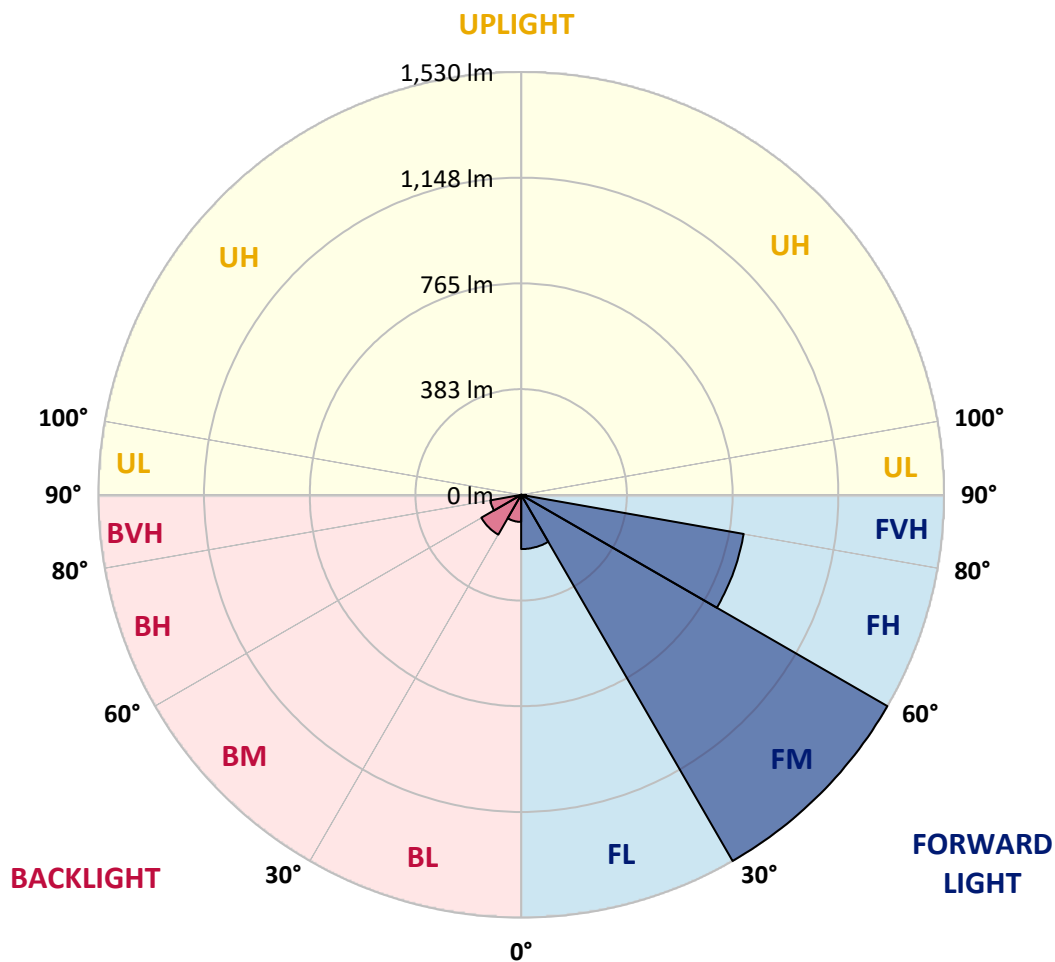
CATALOG NUMBER: ARCH-S-PA1-30-730-U-T2U-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	196.3	6.7			
FM	(30°-60°)	1530.1	52.1			
FH	(60°-80°)	817.7	27.8			G1/1800
FVH	(80°-90°)	16.7	0.6			G1/100
BL	(0°-30°)	98.0	3.3	B0/110		
BM	(30°-60°)	166.2	5.7	B0/220		
BH	(60°-80°)	113.3	3.9	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-G1**

Type II Short





REPORT NUMBER: P397691

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8
2.5°	460.5	459.4	458.3	457.7	457.7	457.2	455.0	454.4	453.3	452.2	451.1
5°	456.1	454.4	453.9	454.4	455.0	456.1	455.0	455.0	453.9	452.8	450.5
7.5°	445.0	443.9	444.4	446.1	446.7	450.5	451.1	452.8	452.8	451.6	450.0
10°	431.7	431.1	431.1	433.9	436.7	442.2	446.1	450.5	451.1	451.1	448.3
12.5°	421.7	421.1	422.8	426.1	431.7	438.9	445.5	452.2	453.3	453.9	449.4
15°	415.6	415.6	417.8	424.5	432.2	442.2	450.0	458.9	460.0	459.4	453.3
17.5°	410.0	410.6	415.0	426.1	435.0	448.3	457.7	467.7	468.3	467.7	457.7
20°	407.8	408.9	415.6	430.0	440.0	455.0	467.2	477.2	477.7	475.5	462.2
22.5°	413.9	414.5	422.8	438.3	447.8	464.4	479.9	489.4	489.9	486.6	468.8
25°	435.0	435.0	442.2	455.5	463.9	480.5	497.1	508.2	508.2	504.4	483.8
27.5°	484.4	479.9	478.3	482.2	484.9	502.7	520.4	534.3	533.8	528.2	503.2
30°	579.8	568.7	551.0	531.0	521.0	533.2	549.9	567.6	567.1	558.2	527.1
32.5°	740.2	724.1	681.9	629.2	586.5	572.6	588.1	607.6	608.1	597.6	565.4
35°	964.9	939.4	863.9	790.7	693.0	640.3	644.7	665.8	672.5	666.9	629.8
37.5°	1181.3	1158.0	1085.8	984.3	851.7	744.0	725.2	743.5	751.3	751.3	711.9
40°	1399.3	1372.1	1308.3	1206.2	1066.4	906.1	838.4	853.4	861.7	863.3	811.7
42.5°	1574.1	1556.3	1507.5	1428.2	1297.2	1190.1	1001.5	993.2	1000.9	994.8	927.7
45°	1695.1	1681.2	1647.3	1617.4	1553.6	1499.7	1219.6	1163.5	1168.5	1147.4	1058.1
47.5°	1720.0	1704.5	1697.3	1738.9	1784.4	1797.7	1487.5	1366.0	1361.0	1314.4	1193.5
50°	1611.3	1612.9	1639.6	1758.3	1948.1	2067.9	1798.3	1594.6	1576.3	1472.6	1319.4
52.5°	1376.6	1403.2	1470.3	1662.9	1998.0	2264.3	2109.0	1837.1	1808.8	1626.3	1413.7
55°	1077.0	1111.4	1221.8	1443.2	1893.7	2352.0	2370.9	2089.0	2024.6	1741.7	1487.0
57.5°	800.6	811.2	939.9	1141.9	1646.8	2266.0	2505.1	2283.2	2200.5	1833.8	1559.7
60°	498.8	505.5	641.4	869.4	1247.3	1948.1	2505.1	2416.9	2338.1	1916.4	1626.3
62.5°	310.2	312.4	363.4	595.9	847.8	1444.8	2401.4	2520.7	2457.4	1975.8	1683.4
65°	178.7	180.9	204.7	336.8	551.5	865.0	2136.2	2551.2	2522.9	2023.0	1727.8
67.5°	130.4	131.5	140.9	189.2	360.7	444.4	1604.6	2428.6	2464.1	2046.3	1726.7
70°	113.2	114.9	127.1	147.6	260.2	273.0	816.7	2097.3	2196.6	2013.0	1675.1
72.5°	87.1	89.3	107.6	138.7	190.9	196.4	295.7	1492.5	1642.9	1804.9	1533.6
75°	59.9	62.1	80.5	114.3	157.6	147.0	162.6	686.9	866.7	1210.7	1167.4
77.5°	38.3	38.8	50.5	83.2	135.9	104.3	111.5	224.2	314.6	547.6	551.0
80°	25.5	26.1	31.1	53.8	93.2	96.5	68.8	103.8	113.7	159.8	111.0
82.5°	15.5	15.5	21.1	33.8	56.6	79.9	44.9	54.4	58.3	61.6	28.9
85°	6.1	6.1	12.8	22.2	35.5	37.2	28.3	31.6	33.3	36.1	13.3
87.5°	1.7	1.7	7.2	12.2	15.5	17.2	17.2	15.5	16.6	20.5	6.7
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: P397691

CATALOG NUMBER: ARCH-S-PA1-30-730-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8	452.8
2.5°	450.5	448.9	446.7	444.4	442.2	440.5	438.9	438.9	437.8	436.1	435.0
5°	449.4	446.7	441.7	437.8	431.7	427.2	423.9	421.1	419.5	415.6	415.0
7.5°	447.8	444.4	437.2	429.5	419.5	411.7	403.9	398.4	392.8	388.4	387.3
10°	445.0	441.1	430.6	419.5	405.6	391.2	372.9	351.8	332.4	321.3	317.9
12.5°	445.0	440.0	426.1	411.1	391.2	355.7	309.0	262.4	226.4	210.3	205.8
15°	447.8	441.1	422.8	402.3	365.1	293.0	217.5	155.9	116.5	104.3	101.5
17.5°	450.5	441.1	417.8	390.1	317.4	212.5	123.7	82.1	69.4	66.6	66.6
20°	451.6	440.0	411.1	367.3	253.6	132.1	73.8	61.6	56.6	54.9	54.9
22.5°	456.1	440.5	406.1	334.6	184.2	77.7	58.3	51.6	46.6	44.9	44.9
25°	467.2	447.2	407.3	293.0	118.2	58.8	49.4	42.7	37.7	35.5	35.5
27.5°	484.9	462.2	413.4	244.7	74.3	50.5	41.6	34.4	30.5	28.3	28.3
30°	504.9	478.8	416.1	189.2	55.5	42.7	33.8	27.2	24.4	22.7	22.2
32.5°	539.9	507.7	413.9	129.8	45.5	36.1	27.2	21.6	19.4	18.9	18.9
35°	595.9	558.2	409.5	81.6	37.7	28.9	21.6	17.8	16.1	15.5	15.0
37.5°	671.9	632.0	396.2	53.8	31.1	22.7	17.8	15.0	13.3	12.8	12.8
40°	764.6	716.3	370.6	41.1	26.6	18.3	15.0	12.8	11.7	11.1	11.1
42.5°	870.6	810.1	330.1	35.5	22.2	15.5	12.8	10.5	10.0	9.4	9.4
45°	986.5	908.3	274.1	31.6	18.9	12.8	10.5	9.4	8.3	8.3	7.8
47.5°	1109.7	1007.0	210.8	27.7	16.1	11.1	9.4	7.8	7.2	6.7	6.7
50°	1228.4	1095.3	148.1	23.9	13.3	9.4	7.8	6.7	6.1	5.5	5.5
52.5°	1312.2	1148.5	104.9	20.5	11.1	8.3	6.1	5.0	4.4	4.4	4.4
55°	1379.3	1181.8	73.2	17.2	9.4	7.2	5.0	3.9	3.9	3.3	3.3
57.5°	1442.6	1203.5	53.8	14.4	7.8	5.5	3.9	2.8	2.8	2.2	2.2
60°	1508.1	1215.1	41.1	11.7	6.7	4.4	2.8	2.2	1.7	1.7	1.7
62.5°	1574.1	1222.3	31.6	9.4	5.5	3.3	2.2	1.7	1.1	0.6	0.6
65°	1631.8	1224.5	24.4	7.2	4.4	2.2	1.7	0.6	0.0	0.0	0.0
67.5°	1649.0	1199.0	18.9	5.5	3.3	1.7	1.1	0.0	0.0	0.0	0.0
70°	1602.4	1131.3	14.4	4.4	2.8	1.1	0.6	0.0	0.0	0.0	0.0
72.5°	1422.1	948.8	11.1	2.8	2.2	1.1	0.6	0.0	0.0	0.0	0.0
75°	1017.6	506.0	7.8	2.2	1.7	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	468.3	195.9	5.5	1.7	1.1	0.6	0.0	0.0	0.0	0.0	0.0
80°	91.5	48.8	2.2	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.1	8.3	1.1	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.2	2.8	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	1.1	0.6	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)