

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: P348817

Luminaire Tested: **ARCH-N-PA1-40-730-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348817  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-730-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3546 lumens  
Efficiency: N/A  
Efficacy: 86.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 41  
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

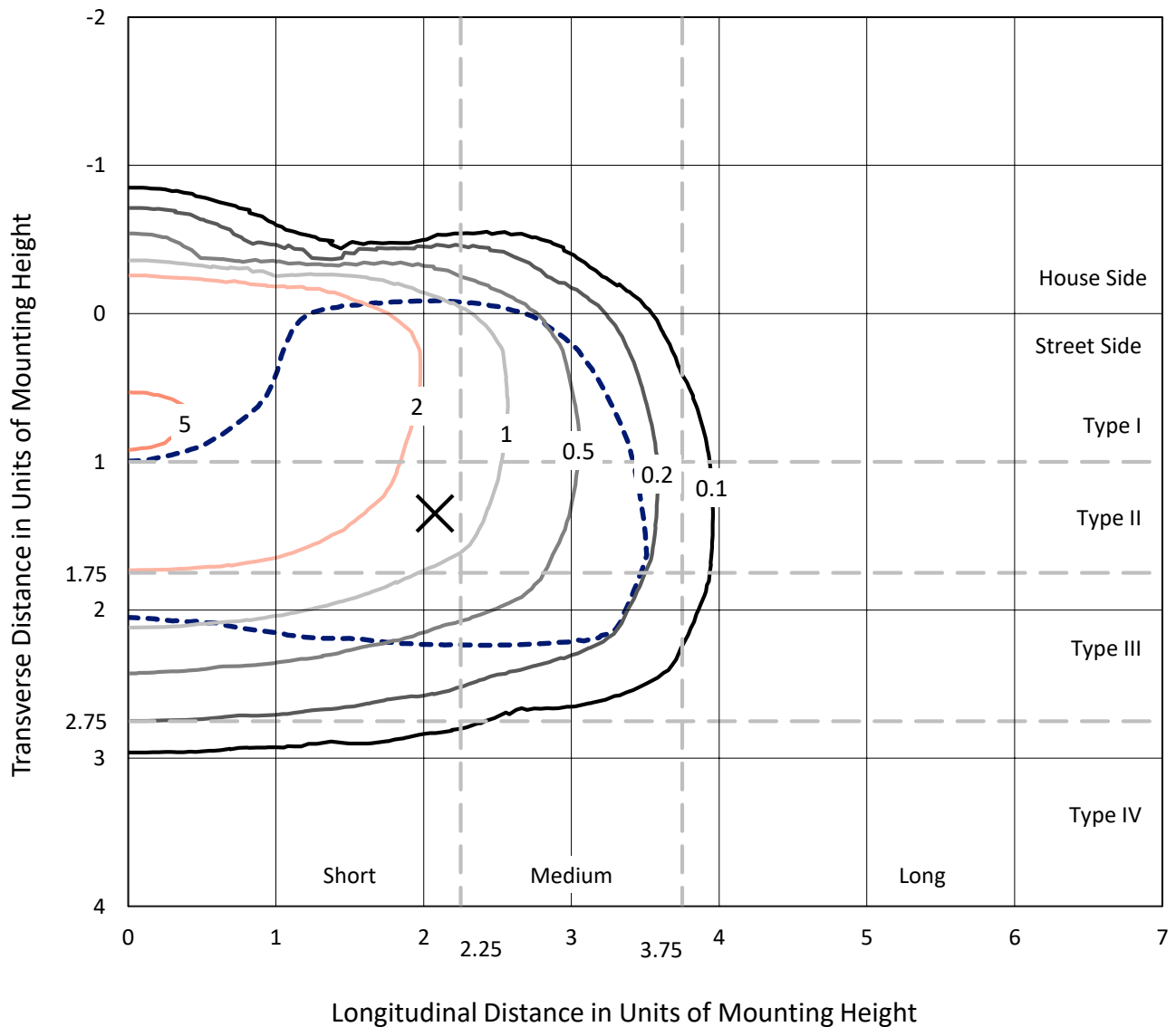


REPORT NUMBER: P348817

CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

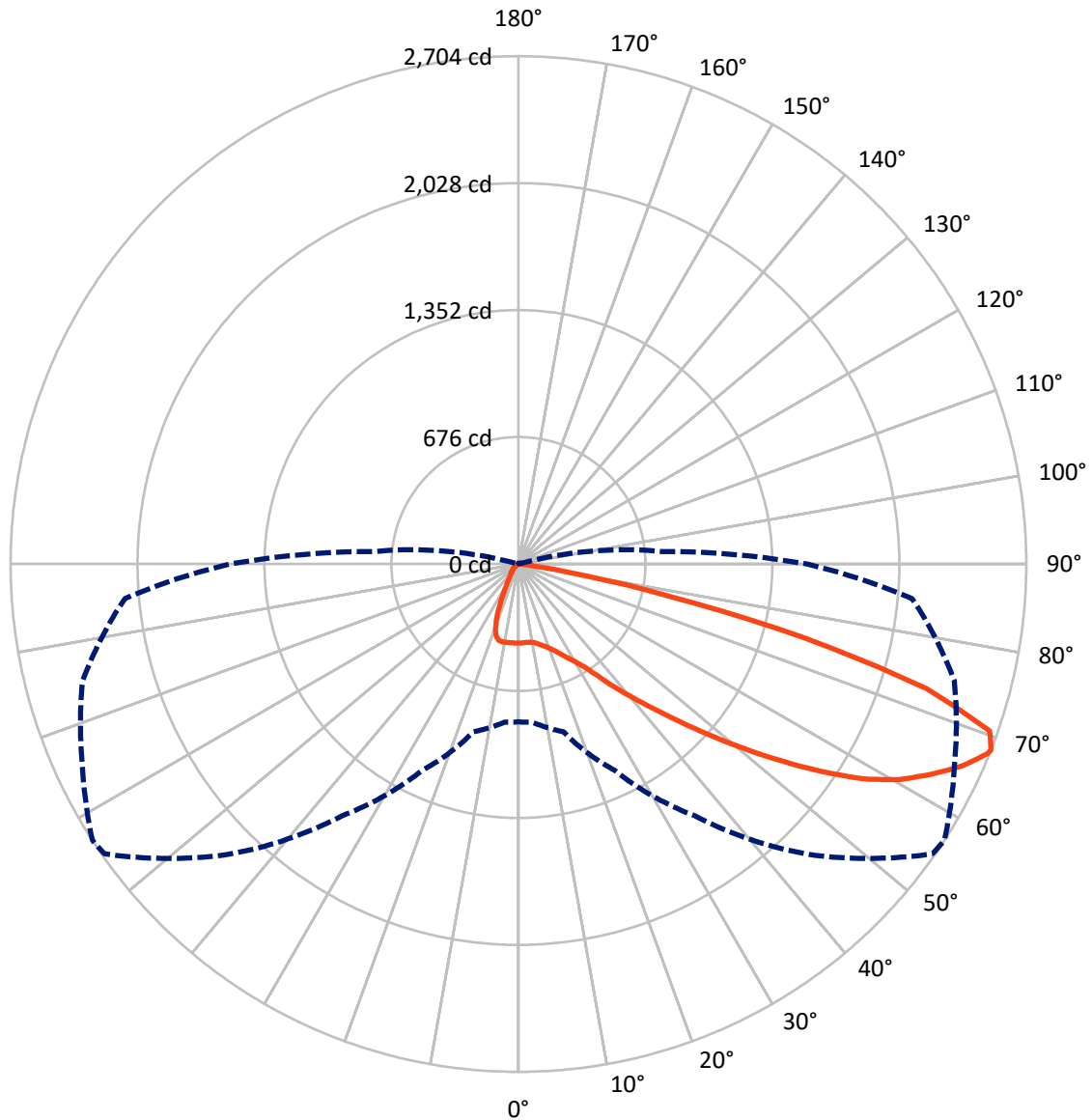


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P348817

CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P348817

CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

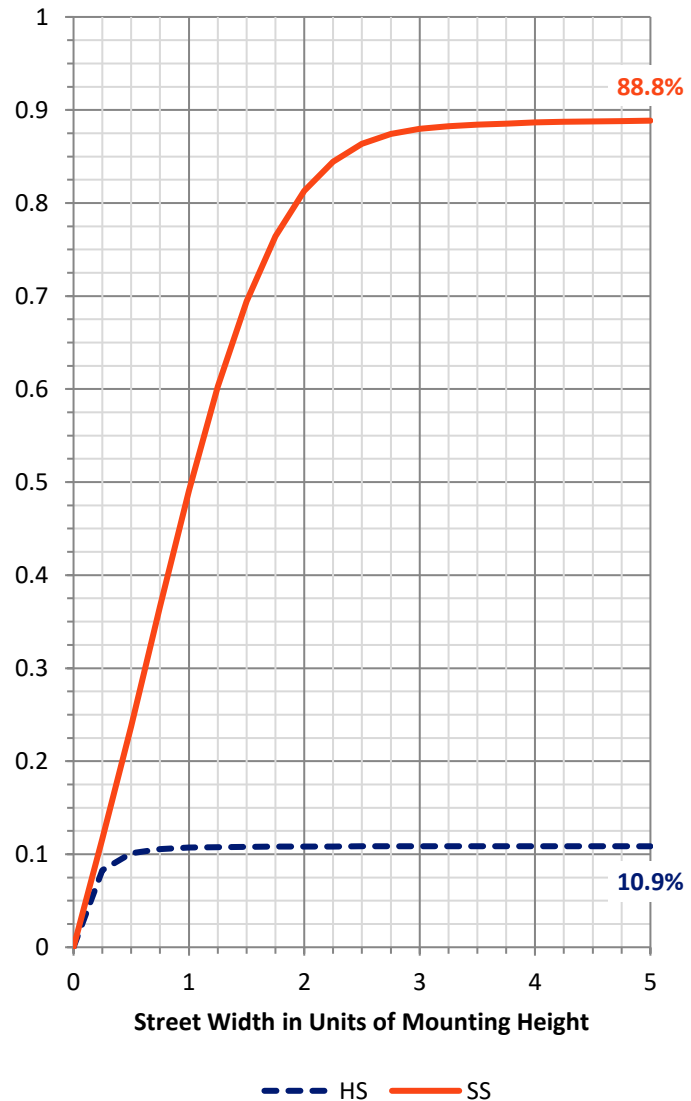
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	388.8	0.0	388.8
	% Fixture	11.0	0.0	11.0
<b>Street Side</b>	Lumens	3157.2	0.0	3157.2
	% Fixture	89.0	0.0	89.0
<b>Total</b>	Lumens	3546.0	0.0	3546.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.4	1.1
10°-20°	109.3	3.1
20°-30°	188.5	5.3
30°-40°	325.3	9.2
40°-50°	556.5	15.7
50°-60°	890.4	25.1
60°-70°	1028.7	29.0
70°-80°	393.1	11.1
80°-90°	14.7	0.4
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°	3546.0	100.0
0°-180°	3546.0	100.0



REPORT NUMBER: P348817

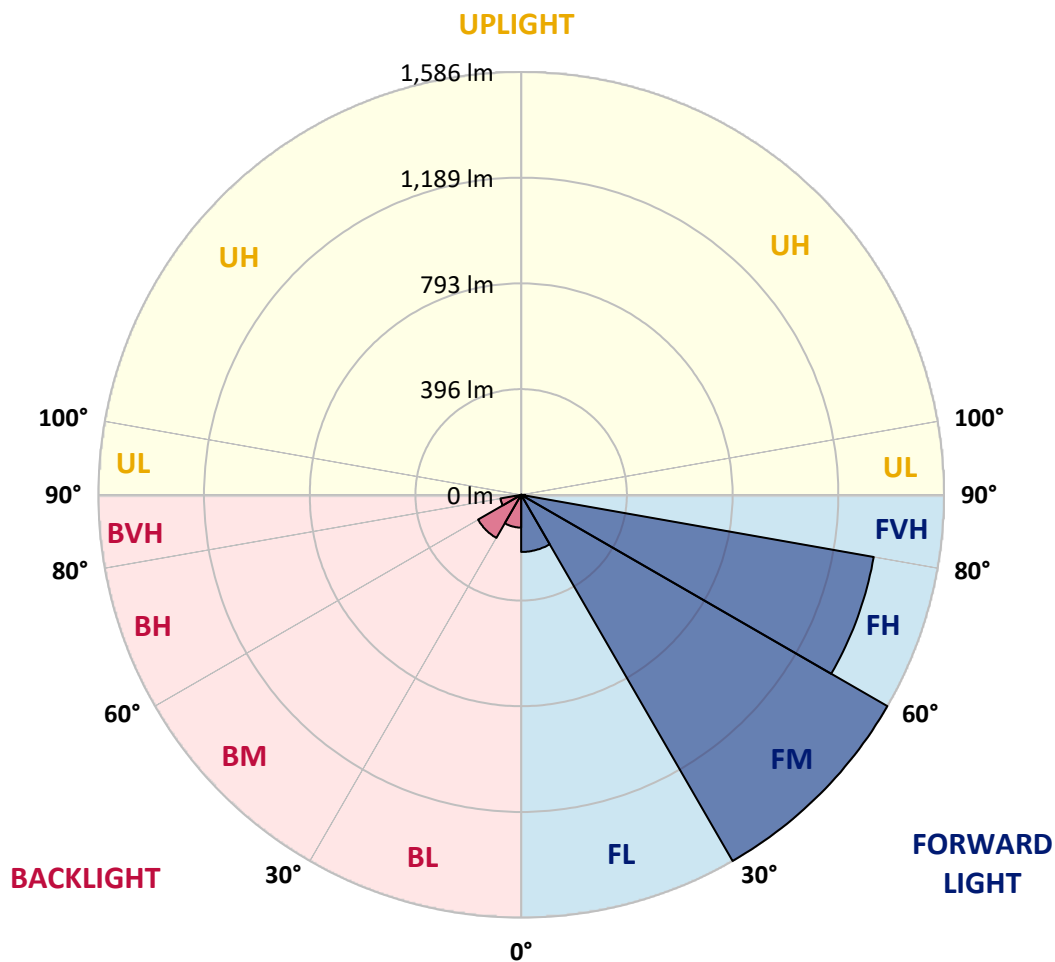
CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	214.3	6.0			
FM	(30°-60°)	1585.7	44.7			
FH	(60°-80°)	1342.6	37.9			G1/1800
FVH	(80°-90°)	14.5	0.4			G1/100
BL	(0°-30°)	122.9	3.5	B1/500		
BM	(30°-60°)	186.5	5.3	B0/220		
BH	(60°-80°)	79.2	2.2	B0/110		G0/110
BVH	(80°-90°)	0.3	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 III Short





REPORT NUMBER: P348817

CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4
2.5°	411.5	413.3	414.7	415.5	416.5	418.7	419.3	420.4	420.9	420.9	422.0
5°	395.2	397.2	400.1	402.4	407.1	413.1	417.5	419.2	422.2	424.9	426.4
7.5°	380.1	382.5	385.8	391.3	399.4	409.1	418.2	420.5	426.4	432.1	434.9
10°	370.4	372.2	376.6	384.5	395.0	408.6	421.4	424.2	434.3	443.8	449.2
12.5°	367.0	368.7	373.2	382.1	395.2	411.1	428.7	432.9	447.7	461.6	469.1
15°	371.9	372.2	377.1	385.5	398.4	417.3	441.0	446.0	464.6	482.7	492.1
17.5°	390.7	389.2	391.7	395.4	405.6	425.6	453.9	461.4	486.2	507.5	516.4
20°	437.6	437.6	431.9	421.9	422.0	438.3	471.3	479.9	510.2	534.9	542.9
22.5°	517.9	516.4	505.0	480.4	457.7	460.3	492.6	503.7	539.1	565.4	568.1
25°	614.5	612.7	595.1	560.4	521.1	495.8	521.5	534.2	573.4	596.7	591.2
27.5°	716.8	715.3	697.8	654.8	598.9	552.5	555.8	567.9	608.5	631.5	613.8
30°	815.9	816.4	799.1	754.9	691.6	624.7	599.4	606.5	642.5	665.8	640.7
32.5°	910.1	910.8	895.9	846.4	787.4	708.7	659.8	657.9	682.1	705.1	676.2
35°	994.1	995.8	985.6	947.2	884.6	802.3	738.1	733.7	738.3	764.2	730.7
37.5°	1075.1	1076.1	1068.4	1036.0	983.7	905.1	837.0	830.8	821.1	841.0	802.6
40°	1163.8	1161.3	1152.4	1123.1	1078.1	1018.6	943.3	932.6	915.7	933.4	897.2
42.5°	1246.3	1243.5	1245.0	1211.8	1173.9	1135.3	1067.2	1048.8	1038.9	1059.3	1013.2
45°	1349.4	1347.9	1352.9	1324.1	1293.4	1265.4	1209.2	1189.1	1184.8	1208.7	1153.6
47.5°	1451.2	1454.9	1470.5	1458.2	1445.8	1421.2	1359.6	1350.6	1353.3	1382.3	1301.6
50°	1536.0	1540.4	1583.2	1597.2	1615.2	1600.8	1539.1	1533.5	1544.1	1570.2	1460.9
52.5°	1597.4	1606.3	1659.4	1724.3	1789.7	1799.4	1737.9	1732.9	1747.1	1751.2	1584.0
55°	1640.0	1647.9	1708.1	1826.8	1959.9	2001.8	1963.6	1944.2	1941.5	1901.7	1713.4
57.5°	1647.5	1646.7	1733.2	1893.0	2093.4	2201.5	2177.4	2158.3	2103.3	2040.9	1861.8
60°	1605.0	1609.8	1710.2	1916.0	2177.2	2352.6	2354.4	2329.6	2243.9	2176.2	2005.7
62.5°	1473.8	1493.6	1595.1	1855.8	2176.2	2413.5	2484.2	2465.3	2362.8	2287.0	2151.6
65°	1261.2	1268.3	1365.0	1649.6	2029.2	2388.0	2601.1	2594.0	2470.0	2394.7	2226.5
67.5°	921.0	905.8	1007.4	1299.0	1718.0	2239.4	2684.9	2693.8	2552.6	2416.8	2146.7
68°	840.5	845.1	924.2	1212.3	1636.5	2186.9	2690.5	2704.0	2560.8	2402.4	2103.1
70°	501.0	509.7	580.3	834.7	1245.0	1890.0	2630.8	2661.8	2511.9	2253.7	1819.1
72.5°	127.9	138.3	205.1	373.6	711.1	1331.6	2220.8	2273.3	2180.9	1828.3	1228.0
75°	52.6	55.3	73.3	123.1	264.9	599.9	1463.8	1576.1	1511.9	1094.6	555.0
77.5°	36.4	38.2	47.1	68.2	114.7	203.4	717.6	798.8	719.6	373.6	121.1
80°	26.2	27.7	33.7	45.4	65.9	72.6	233.9	270.5	214.8	82.0	30.0
82.5°	15.6	16.8	25.2	32.4	40.1	34.7	58.2	66.1	62.2	40.7	13.4
85°	7.7	9.1	16.9	23.1	21.6	14.6	17.8	19.8	24.5	24.8	7.2
87.5°	0.5	1.0	9.9	13.9	6.0	3.4	5.2	6.4	8.7	12.2	3.0
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: P348817

CATALOG NUMBER: ARCH-N-PA1-40-730-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4	421.4
2.5°	422.5	422.7	421.5	421.0	421.4	419.3	418.5	418.8	418.8	419.3	418.5
5°	426.7	426.7	424.7	422.0	420.5	416.7	414.1	413.5	413.0	412.6	412.0
7.5°	435.8	434.8	431.3	425.4	420.4	412.0	405.6	402.2	400.6	399.9	399.4
10°	450.4	448.5	442.7	431.8	420.2	405.3	391.3	381.5	373.2	369.9	367.9
12.5°	470.0	467.3	457.4	439.3	419.0	391.5	361.3	332.3	305.3	294.3	288.7
15°	492.6	488.8	473.2	445.7	412.1	360.5	294.9	244.1	206.7	192.7	186.6
17.5°	515.6	510.6	486.9	449.7	391.5	296.3	206.9	156.3	131.3	124.6	122.2
20°	538.7	531.4	498.8	446.7	344.9	213.6	136.5	114.2	107.0	105.0	104.3
22.5°	560.7	549.3	509.6	434.9	273.1	143.4	108.0	100.9	98.6	97.4	97.1
25°	579.8	563.9	518.9	398.7	193.3	108.3	97.2	94.9	91.9	89.7	89.9
27.5°	597.7	578.5	524.6	339.0	128.9	92.6	90.0	86.9	81.3	78.1	78.1
30°	619.4	597.9	528.8	260.9	94.9	81.8	79.8	74.9	67.4	63.2	63.2
32.5°	651.9	627.4	526.2	183.1	78.6	71.9	67.2	60.5	52.3	48.3	48.1
35°	701.7	673.0	507.0	120.1	69.4	62.5	55.0	46.8	39.6	36.2	36.0
37.5°	768.8	734.1	464.1	85.8	62.2	53.8	44.8	35.7	30.3	28.2	28.0
40°	855.8	805.0	402.7	69.6	55.5	45.4	34.5	27.7	24.0	22.3	22.5
42.5°	960.3	880.9	329.1	60.0	49.0	37.4	27.0	21.8	19.4	18.3	17.9
45°	1076.3	955.9	252.0	53.5	42.4	30.2	21.1	17.3	15.4	14.8	14.8
47.5°	1203.9	1028.8	184.4	47.8	35.4	23.3	16.9	14.1	12.6	12.1	11.9
50°	1319.7	1079.5	133.0	41.8	29.0	18.4	13.7	11.7	10.7	10.1	10.1
52.5°	1416.3	1095.4	97.9	35.2	23.5	14.8	11.4	10.1	9.1	8.6	8.6
55°	1501.3	1088.9	72.8	29.0	18.9	12.1	9.7	8.6	7.7	7.2	7.2
57.5°	1582.8	1067.7	54.3	23.6	15.3	9.7	8.2	7.2	6.4	6.0	6.0
60°	1649.4	1032.5	40.4	19.1	12.2	7.9	6.9	5.9	5.2	4.7	4.7
62.5°	1703.4	993.6	29.7	15.8	9.7	6.2	5.4	4.9	3.9	3.4	3.4
65°	1703.7	929.1	22.3	13.1	7.5	4.9	4.0	3.9	2.5	2.0	1.8
67.5°	1580.5	801.0	17.1	11.2	5.9	3.7	3.0	3.2	1.3	0.8	0.7
68°	1535.7	768.4	16.1	11.1	5.5	3.5	2.9	3.2	1.2	0.7	0.5
70°	1294.8	611.3	12.9	10.7	4.9	2.7	2.3	3.2	1.0	0.5	0.3
72.5°	828.1	354.8	9.6	8.6	3.7	2.0	1.5	2.9	1.0	0.3	0.2
75°	352.4	110.0	6.5	6.0	2.2	1.5	1.0	1.8	0.7	0.2	0.0
77.5°	74.3	24.8	3.9	3.7	1.5	1.0	0.7	0.5	0.2	0.0	0.0
80°	19.1	7.2	2.0	1.8	0.8	0.5	0.3	0.0	0.0	0.0	0.0
82.5°	6.0	2.9	1.2	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.5	0.2	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)