

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: P348628

Luminaire Tested: **ARCH-N-PA1-40-830-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-40-830-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4403 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

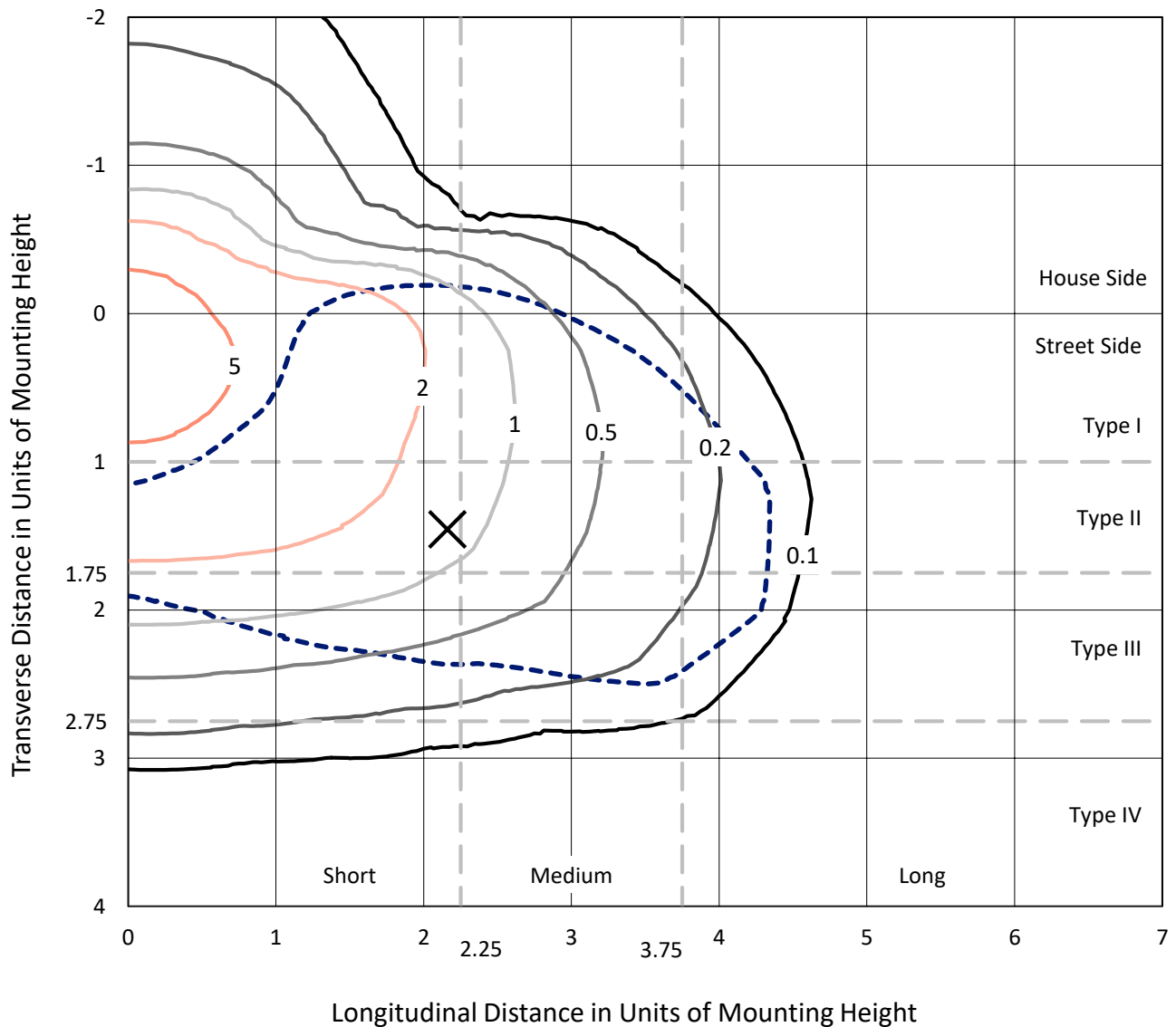


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

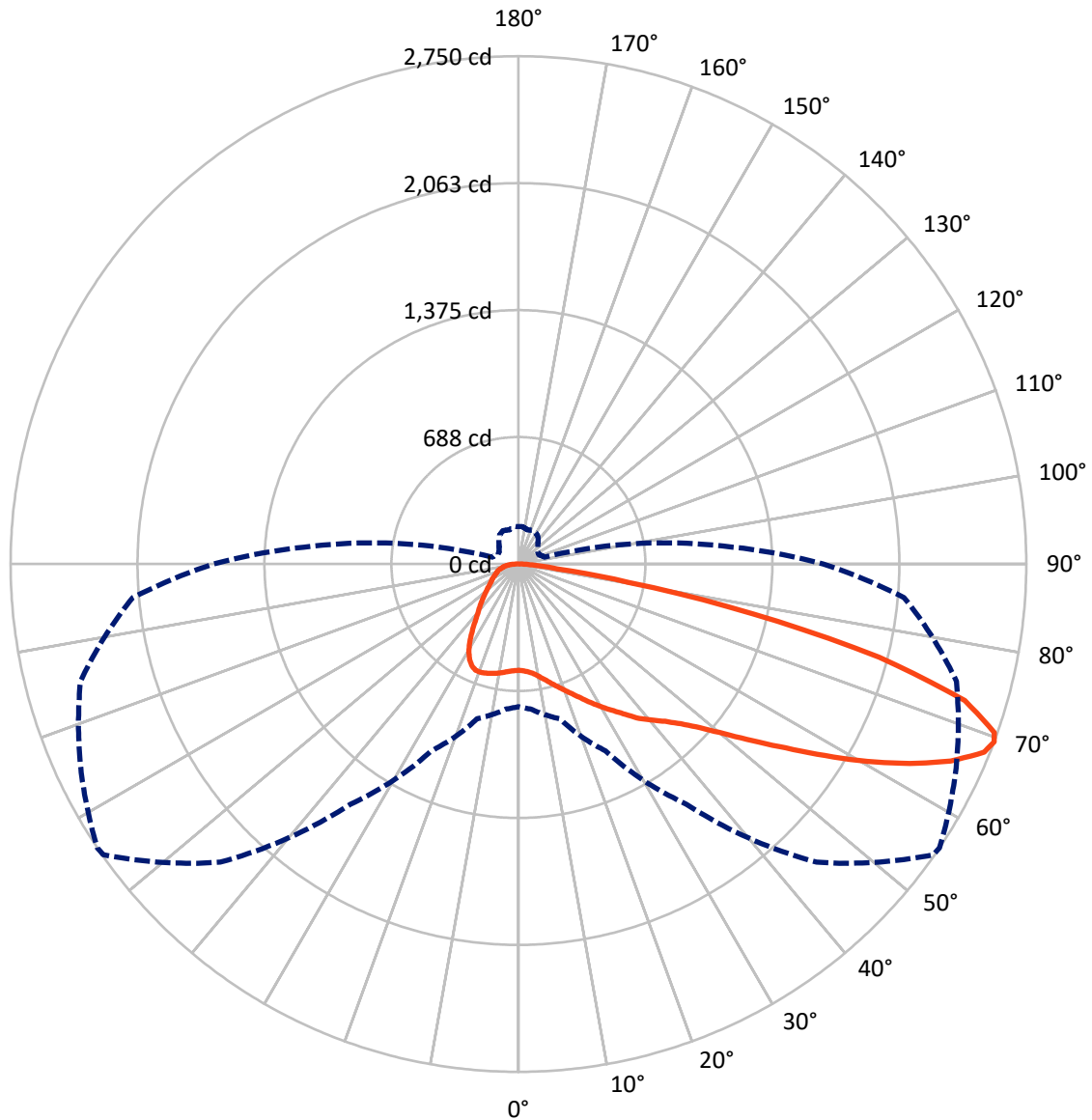


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	980.5	0.0	980.5
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	3422.4	0.0	3422.4
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	4403.0	0.0	4403.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.5	1.3
10°-20°	181.8	4.1
20°-30°	317.3	7.2
30°-40°	455.9	10.4
40°-50°	630.9	14.3
50°-60°	924.3	21.0
60°-70°	1126.9	25.6
70°-80°	623.0	14.2
80°-90°	86.3	2.0
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°	4403.0	100.0
0°-180°	4403.0	100.0



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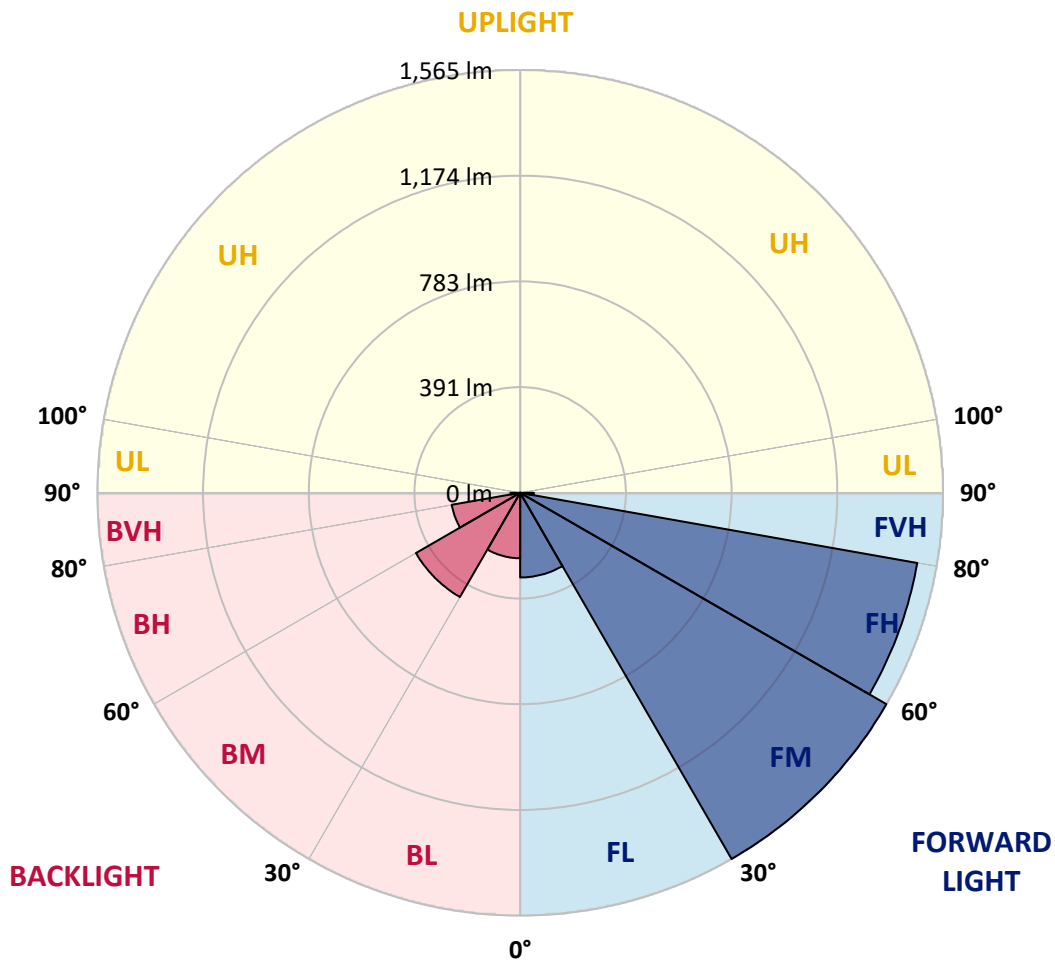
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	313.4	7.1			
FM	(30°-60°)	1565.4	35.6			
FH	(60°-80°)	1492.8	33.9			G1/1800
FVH	(80°-90°)	50.8	1.2			G1/100
BL	(0°-30°)	242.3	5.5	B1/500		
BM	(30°-60°)	445.6	10.1	B1/1000		
BH	(60°-80°)	257.1	5.8	B1/500		G1/500
BVH	(80°-90°)	35.5	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6
2.5°	579.3	579.9	579.4	580.6	579.3	580.2	579.4	579.4	579.0	577.6	576.1
5°	588.4	589.6	588.8	590.0	588.4	588.7	587.3	587.3	585.9	583.1	580.0
7.5°	602.6	604.0	603.4	604.6	602.3	602.3	600.5	600.3	597.6	592.9	589.4
10°	619.6	621.4	620.8	622.6	620.8	621.4	619.6	619.6	616.0	609.3	604.9
12.5°	644.3	646.6	644.9	644.8	644.0	645.2	643.7	643.4	640.1	631.0	624.9
15°	677.4	679.8	676.3	676.0	671.8	671.3	671.3	670.9	668.8	657.8	647.8
17.5°	715.5	716.2	713.2	708.3	702.9	699.4	698.9	700.2	700.2	687.4	671.5
20°	752.8	754.2	751.7	746.3	739.3	734.1	730.5	732.9	732.8	717.6	695.0
22.5°	793.4	796.6	793.0	786.0	777.8	772.1	765.7	767.8	768.0	749.3	718.1
25°	846.1	843.2	840.9	831.1	819.4	813.5	807.5	809.7	809.1	783.4	741.9
27.5°	892.6	893.2	890.2	879.7	866.2	853.2	852.9	854.3	852.0	818.9	764.3
30°	946.8	947.1	942.8	933.4	918.7	901.9	897.9	900.2	895.4	852.6	788.0
32.5°	1000.6	1002.2	997.4	986.1	974.2	953.8	945.9	947.4	935.3	887.0	812.4
35°	1047.8	1049.9	1048.4	1040.8	1027.9	1010.3	1000.9	1000.0	985.0	929.2	844.7
37.5°	1095.9	1097.9	1096.2	1089.8	1084.7	1066.0	1061.0	1061.0	1034.9	972.3	885.8
40°	1145.3	1148.4	1146.4	1137.6	1133.2	1124.7	1112.7	1109.8	1081.6	1024.0	952.9
42.5°	1191.3	1195.2	1203.1	1198.0	1189.0	1190.2	1166.1	1164.6	1144.0	1100.4	1037.0
45°	1256.5	1262.3	1275.6	1271.7	1269.9	1263.2	1234.5	1233.2	1225.3	1203.3	1141.5
47.5°	1327.7	1335.5	1359.7	1360.4	1380.0	1367.4	1328.4	1323.7	1325.5	1326.4	1269.1
50°	1393.2	1401.8	1441.4	1460.1	1506.2	1508.9	1446.6	1442.3	1449.5	1470.4	1417.8
52.5°	1445.5	1456.4	1505.9	1563.5	1642.5	1665.0	1592.0	1588.8	1594.2	1630.3	1585.8
55°	1483.9	1495.7	1549.6	1654.5	1780.7	1820.3	1759.5	1756.5	1759.8	1805.8	1768.6
57.5°	1492.8	1495.7	1573.8	1715.8	1897.4	1992.5	1964.4	1958.3	1942.0	1982.0	1970.3
60°	1450.8	1462.3	1553.8	1737.3	1987.6	2162.2	2178.6	2171.0	2125.0	2157.8	2148.4
62.5°	1365.6	1386.2	1479.0	1704.6	2023.0	2300.8	2388.7	2379.6	2300.4	2321.6	2276.4
65°	1226.3	1235.1	1332.7	1591.6	1978.1	2389.6	2576.0	2571.4	2471.8	2438.6	2300.1
67.5°	977.3	993.8	1076.6	1355.4	1794.4	2379.1	2720.8	2720.4	2583.7	2481.9	2216.2
69°	772.1	789.2	868.1	1116.5	1587.8	2283.4	2745.1	2750.4	2615.3	2455.5	2096.4
70°	615.5	635.4	689.5	940.4	1404.4	2157.2	2724.9	2734.5	2609.2	2412.0	1985.8
72.5°	262.0	278.0	316.6	484.8	855.9	1610.8	2491.5	2527.6	2468.6	2207.6	1641.2
75°	114.4	119.4	136.8	197.6	380.0	876.7	1951.8	2018.6	2110.8	1866.0	1222.5
77.5°	83.7	85.9	95.4	116.0	170.5	331.1	1255.2	1294.0	1522.3	1357.8	749.9
80°	64.8	66.3	73.7	85.2	111.3	133.9	572.4	605.8	855.9	697.4	312.3
82.5°	51.6	52.6	57.8	62.8	76.9	81.1	190.1	210.8	315.9	192.6	82.7
85°	47.9	49.1	51.0	45.8	49.3	47.6	82.2	86.0	95.4	75.7	34.6
87.5°	21.7	25.6	50.5	35.6	26.2	20.9	33.7	35.2	39.6	39.7	15.3
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°	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6
2.5°	577.0	576.5	577.3	575.5	577.7	577.6	576.8	577.1	578.7	578.5	578.7
5°	580.5	580.2	581.1	579.7	582.5	583.4	583.5	584.9	586.5	587.0	587.0
7.5°	589.3	589.3	589.7	587.9	589.7	589.6	588.8	590.2	591.9	592.0	591.9
10°	604.4	604.6	603.8	599.1	597.6	593.5	589.7	589.9	592.0	593.7	594.1
12.5°	623.6	623.0	619.6	611.0	604.6	596.3	592.3	592.2	594.3	595.6	596.1
15°	645.4	643.7	635.1	621.0	609.8	601.6	595.2	593.7	592.5	590.9	591.1
17.5°	666.0	662.2	647.8	628.3	616.4	605.5	593.2	583.4	576.5	572.6	571.4
20°	687.0	679.5	658.7	635.1	620.1	600.2	576.5	556.5	544.1	538.3	537.3
22.5°	706.1	694.1	668.9	642.2	617.2	582.3	545.1	516.0	498.7	491.0	491.6
25°	724.7	708.0	679.5	647.2	602.6	550.8	501.5	465.7	445.6	437.0	436.7
27.5°	741.1	722.1	691.1	643.1	575.5	505.9	449.7	414.8	398.2	390.7	389.5
30°	759.9	739.9	706.4	627.5	535.7	454.0	399.2	374.6	362.8	355.4	354.0
32.5°	782.8	764.0	719.0	599.1	484.9	399.8	359.8	342.6	331.9	323.5	322.0
35°	816.2	795.9	722.1	558.5	429.1	357.1	330.8	313.2	298.7	287.9	286.8
37.5°	858.1	835.8	714.9	505.9	375.0	329.3	306.7	285.0	266.0	250.9	248.5
40°	918.4	884.8	694.7	445.2	335.1	307.9	283.2	258.5	235.0	217.2	213.7
42.5°	990.9	942.2	663.8	384.8	305.8	286.2	259.8	229.2	206.7	194.2	192.3
45°	1083.1	1002.0	620.8	332.0	277.0	264.5	234.6	206.4	192.5	183.2	181.7
47.5°	1188.4	1069.0	575.8	289.1	252.5	244.2	214.5	196.3	185.2	177.9	176.6
50°	1317.8	1144.7	528.0	253.9	228.0	219.8	204.9	190.7	181.9	176.3	174.9
52.5°	1463.7	1230.1	493.6	226.2	207.7	201.7	199.9	187.6	180.5	176.3	174.9
55°	1620.9	1317.0	456.4	202.8	190.1	191.7	196.6	187.9	183.1	177.9	175.9
57.5°	1778.1	1406.8	415.0	183.1	176.1	184.3	194.3	188.5	184.4	179.4	177.6
60°	1902.5	1463.7	350.8	166.5	165.0	176.1	188.8	184.0	178.7	178.8	178.5
62.5°	1960.6	1460.7	280.0	151.8	154.0	165.0	180.0	176.9	172.5	178.4	178.8
65°	1928.0	1387.9	218.0	138.5	142.1	153.5	170.9	173.4	174.9	186.3	187.8
67.5°	1791.2	1246.2	168.8	126.8	131.4	145.6	171.9	188.8	190.8	202.8	202.6
69°	1649.7	1113.3	146.7	120.7	126.0	147.6	183.7	198.7	191.3	204.0	202.2
70°	1531.1	1008.2	134.8	116.6	123.6	151.1	191.6	198.5	189.0	199.9	196.9
72.5°	1179.2	725.3	114.4	109.1	115.4	144.6	193.8	194.2	183.7	185.8	180.7
75°	808.8	458.4	99.8	98.7	103.0	130.3	186.6	185.5	169.9	166.8	162.6
77.5°	445.9	232.8	84.8	88.9	91.8	115.4	169.6	168.1	155.2	148.8	147.3
80°	172.0	101.9	71.6	79.0	80.8	100.0	148.6	147.3	136.5	128.3	126.0
82.5°	64.9	53.4	59.2	68.4	67.8	82.5	125.9	125.1	114.7	102.7	99.0
85°	30.0	32.0	46.9	56.4	52.0	61.1	100.7	102.1	89.3	75.1	75.1
87.5°	12.7	17.9	33.2	42.6	35.0	41.3	73.9	70.5	64.8	44.9	42.2
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)