

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: P348935

Luminaire Tested: **ARCH-N-PA1-30-740-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348935  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-30-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4385 lumens  
Efficiency: N/A  
Efficacy: 141.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

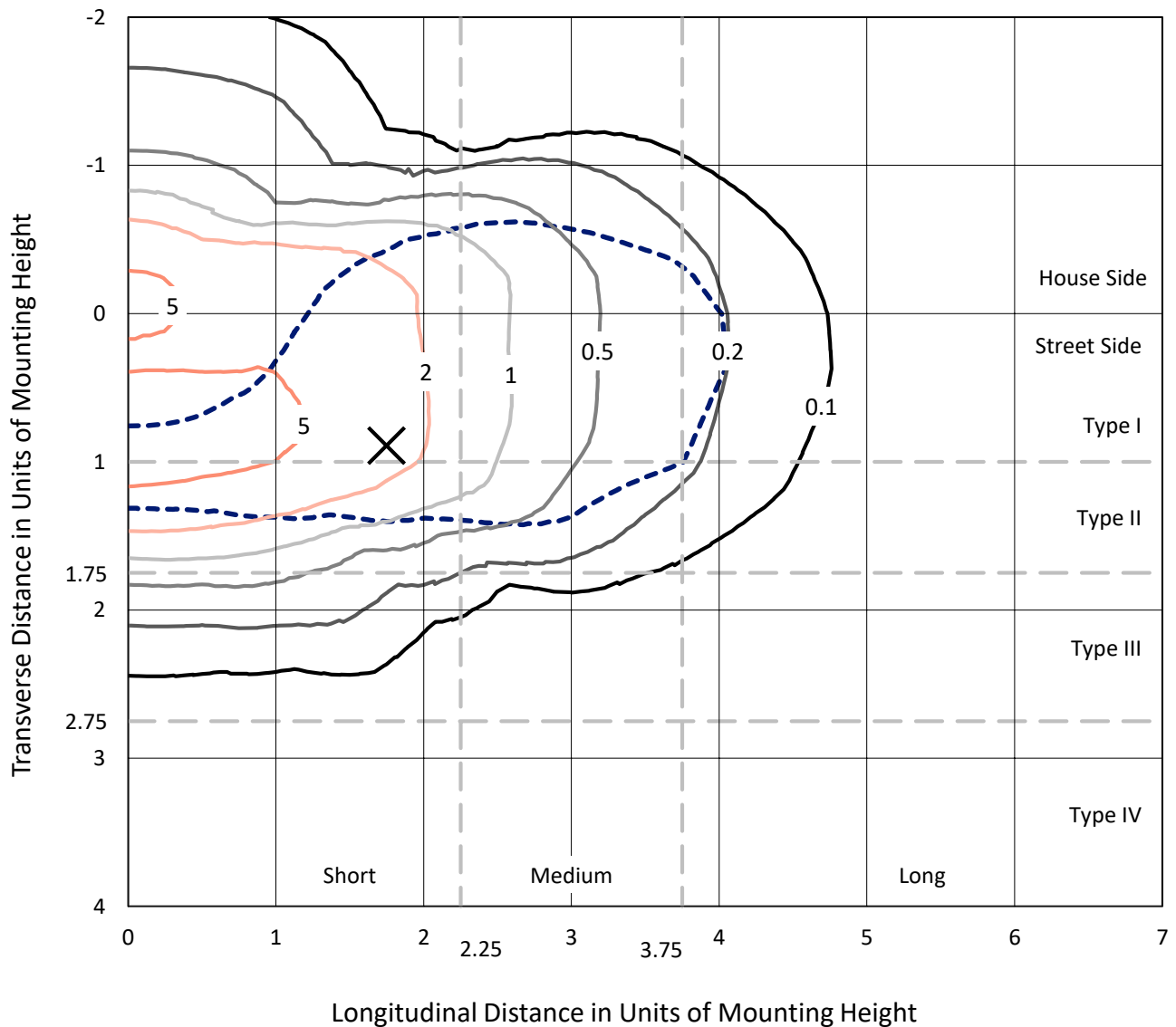
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

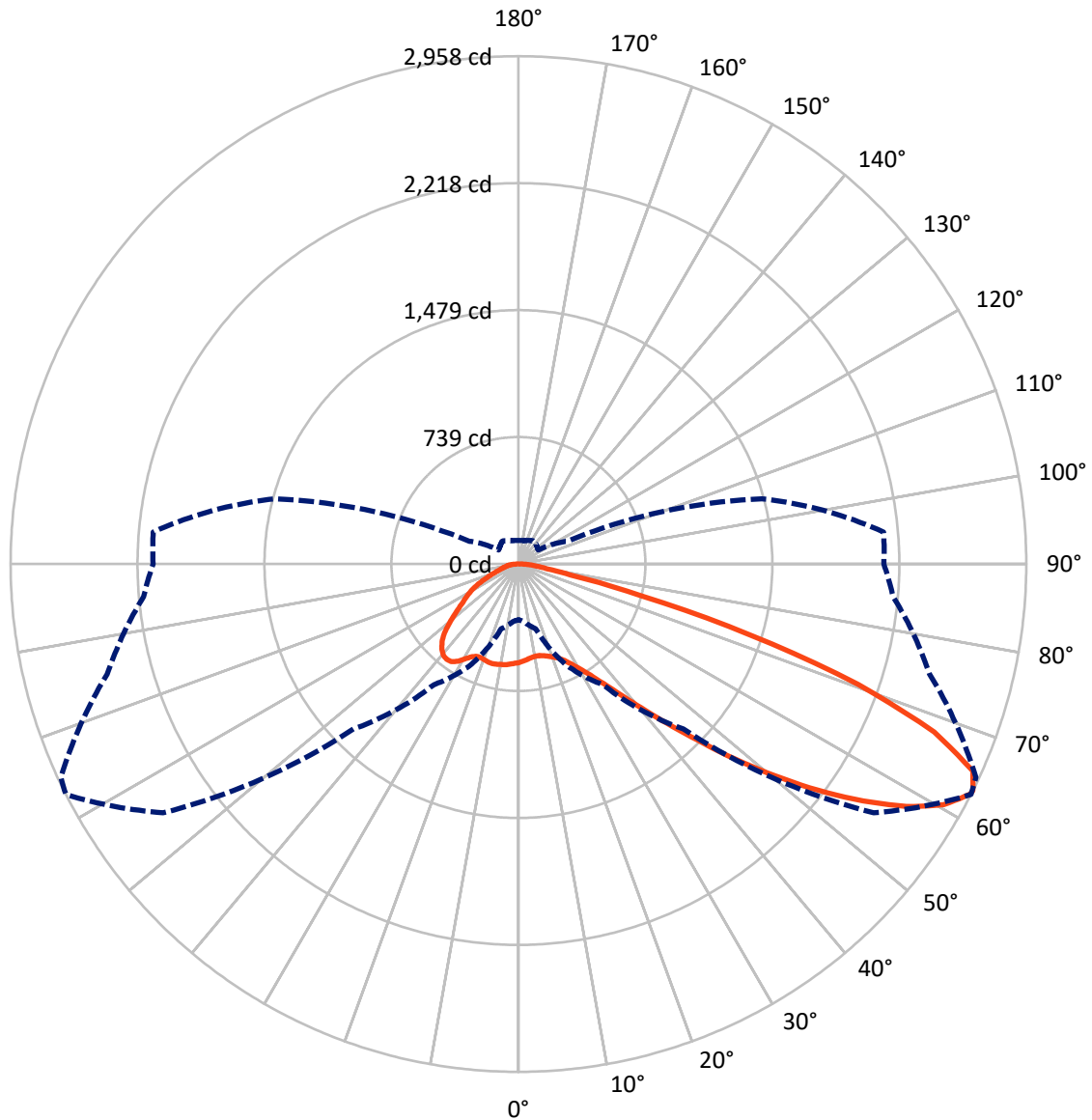
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1251.9	0.0	1251.9
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	3133.1	0.0	3133.1
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	4385.0	0.0	4385.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	1.2
10°-20°	160.7	3.7
20°-30°	282.3	6.4
30°-40°	475.8	10.9
40°-50°	833.5	19.0
50°-60°	1077.3	24.6
60°-70°	932.5	21.3
70°-80°	484.1	11.0
80°-90°	84.4	1.9
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°	4385.0	100.0
0°-180°	4385.0	100.0



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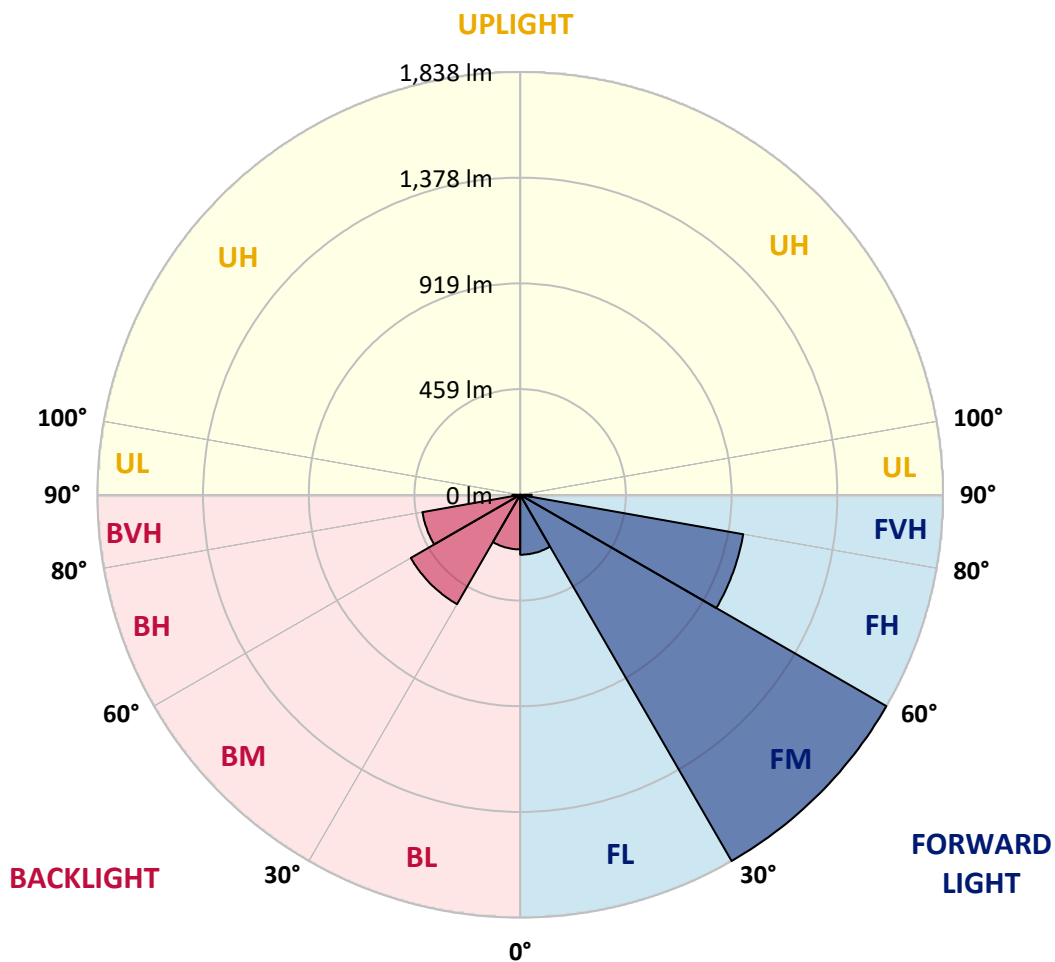
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.3	5.9			
FM	(30°-60°)	1837.8	41.9			
FH	(60°-80°)	984.8	22.5			G1/1800
FVH	(80°-90°)	50.2	1.1			G1/100
BL	(0°-30°)	237.1	5.4	B1/500		
BM	(30°-60°)	548.8	12.5	B1/1000		
BH	(60°-80°)	431.8	9.8	B1/500		G1/500
BVH	(80°-90°)	34.1	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1
2.5°	560.6	558.9	561.8	563.0	562.6	565.1	565.1	565.5	565.5	567.6	569.6
5°	544.2	543.3	546.2	548.3	549.9	553.6	556.1	557.3	558.5	561.4	566.3
7.5°	528.6	527.3	531.4	533.1	535.5	540.9	546.6	549.9	551.6	557.7	564.7
10°	515.9	515.4	518.7	520.4	523.2	531.0	539.2	546.2	547.4	555.7	562.2
12.5°	509.7	508.9	512.6	514.6	519.5	529.0	538.4	547.0	549.1	558.5	564.3
15°	514.6	515.4	518.7	519.1	524.9	534.7	545.4	554.0	556.1	565.5	569.6
17.5°	538.0	537.6	539.7	538.8	540.9	545.8	557.3	564.3	566.7	573.7	577.0
20°	580.3	579.0	580.7	575.4	566.3	563.9	570.8	578.6	579.5	583.6	581.5
22.5°	644.7	645.9	642.2	628.7	607.0	596.7	592.2	594.6	597.5	597.1	591.0
25°	728.8	732.9	726.0	702.2	665.6	641.8	625.4	621.7	623.8	618.0	608.6
27.5°	839.2	842.5	827.3	790.4	741.2	705.9	673.0	660.3	660.3	648.0	630.8
30°	960.7	962.8	938.5	891.8	834.7	782.2	733.8	709.1	707.1	682.9	655.8
32.5°	1108.4	1102.7	1074.0	1016.1	944.3	872.1	809.7	772.3	768.2	731.7	697.2
35°	1299.3	1299.3	1239.8	1173.7	1086.3	994.4	912.3	854.4	850.3	808.9	764.1
37.5°	1506.5	1505.7	1451.9	1360.8	1256.2	1143.7	1034.2	961.9	952.5	908.2	858.1
40°	1712.9	1706.0	1662.5	1575.9	1464.2	1335.8	1184.8	1100.6	1096.1	1032.9	970.1
42.5°	1864.0	1857.4	1836.9	1779.0	1705.5	1612.8	1380.5	1266.8	1260.3	1180.7	1103.9
45°	1947.3	1937.8	1935.0	1935.8	1944.0	1943.6	1622.2	1463.4	1440.4	1348.1	1245.9
47.5°	1928.4	1906.2	1935.8	2011.7	2139.3	2223.0	1903.8	1696.9	1654.3	1522.1	1397.4
50°	1776.1	1765.5	1828.7	1983.4	2245.6	2442.2	2213.6	1939.5	1879.1	1686.7	1540.6
52.5°	1509.0	1529.5	1607.5	1827.4	2226.3	2574.7	2495.1	2191.4	2107.7	1843.4	1664.9
55°	1201.2	1227.0	1337.0	1570.1	2047.8	2576.4	2698.3	2435.6	2360.9	2005.5	1792.1
57.5°	874.1	910.6	1048.1	1261.9	1734.7	2400.3	2798.4	2664.2	2578.8	2165.2	1916.5
60°	549.1	574.9	724.7	972.6	1325.9	2011.7	2773.4	2847.2	2776.6	2315.8	2058.5
62.5°	353.7	366.1	430.9	694.4	924.6	1475.3	2588.3	2952.3	2921.9	2453.3	2165.6
63°	324.2	334.9	390.3	641.8	857.3	1359.2	2525.9	2957.6	2939.6	2479.1	2190.6
65°	231.9	243.4	272.1	441.2	632.8	911.9	2164.4	2908.0	2928.1	2522.2	2224.7
67.5°	183.0	186.7	199.9	268.0	449.0	517.9	1456.4	2611.3	2699.5	2476.2	2174.2
70°	163.7	166.6	181.4	205.6	339.8	335.7	759.6	2099.5	2282.1	2319.5	2047.0
72.5°	142.8	144.9	162.9	193.7	259.4	256.5	330.4	1411.7	1633.7	2032.2	1870.9
75°	118.2	120.2	135.4	172.0	219.6	202.7	206.8	737.9	936.5	1593.1	1640.7
77.5°	97.3	98.5	111.2	138.3	193.3	156.4	160.0	310.2	455.1	1085.9	1295.6
80°	70.6	71.0	82.9	105.1	147.7	141.2	119.0	169.1	206.4	595.1	815.0
82.5°	49.2	49.7	62.0	73.5	101.8	140.8	86.6	113.3	123.9	274.1	362.8
85°	34.5	33.7	42.3	48.4	64.4	85.4	66.1	72.6	76.7	118.6	97.7
87.5°	15.2	14.8	23.8	25.9	32.4	39.4	52.5	38.2	40.6	57.5	30.8
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°	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1	574.1
2.5°	570.0	571.7	574.1	577.8	580.7	581.9	584.4	584.8	588.5	585.2	585.6
5°	569.2	571.3	576.6	583.2	587.7	591.0	597.1	599.2	602.9	601.2	600.8
7.5°	568.0	571.7	579.5	588.9	595.9	601.2	607.0	610.6	614.3	613.5	612.7
10°	566.3	570.8	581.9	591.4	601.2	607.0	611.1	611.5	612.7	611.9	609.8
12.5°	567.6	572.5	585.2	594.6	604.9	609.0	607.8	601.6	596.3	591.8	591.0
15°	571.7	577.4	589.3	597.9	606.1	603.7	596.3	582.7	572.9	567.1	567.6
17.5°	575.8	580.7	589.7	596.7	600.8	593.4	581.9	570.4	565.9	561.4	560.6
20°	579.5	580.3	586.0	592.2	591.8	586.0	575.4	561.4	552.4	545.0	545.4
22.5°	585.2	581.9	582.3	586.0	590.5	585.2	560.2	536.0	522.4	513.8	513.4
25°	598.3	591.4	584.8	586.8	604.1	570.0	527.8	496.2	484.3	476.5	477.3
27.5°	616.4	607.0	593.8	604.9	614.3	540.1	481.4	449.0	440.8	432.5	434.6
30°	636.1	622.5	606.5	643.9	602.9	492.5	423.9	394.4	387.0	379.2	380.8
32.5°	671.4	651.3	630.3	690.7	576.2	434.6	363.6	336.9	332.0	327.1	327.5
35°	730.1	706.3	683.7	726.4	541.7	374.3	309.4	290.6	286.4	280.7	280.7
37.5°	816.7	779.3	767.4	745.3	494.5	318.0	269.6	256.9	248.3	240.5	240.5
40°	917.2	872.9	863.4	751.0	433.0	271.3	241.7	230.6	219.1	207.7	208.5
42.5°	1039.5	979.6	957.8	743.2	358.3	241.3	222.0	209.3	198.2	188.4	186.7
45°	1177.4	1101.5	1046.5	720.6	290.6	222.8	209.3	194.1	180.2	171.5	169.9
47.5°	1318.1	1233.6	1124.9	675.5	242.9	209.7	200.7	179.3	169.5	163.7	162.9
50°	1452.8	1364.5	1189.7	604.5	215.5	200.3	188.0	172.4	164.2	159.2	158.8
52.5°	1572.2	1488.9	1244.3	531.0	197.0	192.5	182.2	169.1	160.5	155.9	155.1
55°	1685.9	1614.9	1298.4	465.4	181.0	179.3	179.3	165.8	156.4	152.3	151.4
57.5°	1810.6	1758.1	1353.0	417.4	166.6	169.9	175.6	162.1	151.8	148.1	147.7
60°	1954.7	1923.9	1410.5	375.1	153.9	159.6	170.3	157.2	146.5	143.6	142.8
62.5°	2102.0	2102.8	1460.1	324.2	143.2	151.8	164.2	152.7	141.6	139.5	139.1
63°	2127.8	2135.2	1467.1	313.1	140.8	150.2	162.5	151.0	140.4	138.3	137.9
65°	2191.4	2223.9	1472.9	266.3	131.7	144.0	156.4	145.7	135.0	134.6	133.8
67.5°	2176.3	2229.2	1437.2	208.9	121.5	135.4	147.7	137.9	128.4	128.4	126.8
70°	2063.0	2097.5	1327.6	161.3	113.7	126.4	137.5	129.7	119.8	120.7	117.4
72.5°	1889.4	1851.6	1092.0	126.0	104.2	116.1	125.6	119.0	110.4	109.6	105.9
75°	1635.0	1510.6	782.2	101.8	92.7	102.6	112.4	107.5	99.7	95.2	94.4
77.5°	1245.9	1072.3	468.7	86.2	82.9	91.1	97.3	93.6	87.4	82.1	82.5
80°	742.0	618.4	211.3	73.0	71.8	78.0	82.9	80.0	75.9	69.4	67.7
82.5°	300.4	239.3	94.8	59.1	60.7	65.3	69.8	67.3	64.0	62.4	52.9
85°	78.0	75.1	55.4	44.3	46.8	48.8	55.0	55.0	52.1	42.7	39.4
87.5°	22.2	29.5	30.8	27.9	31.6	32.0	38.2	38.2	39.0	26.3	23.8
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)