

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: P348929

Luminaire Tested: **ARCH-N-PA1-40-730-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348929  
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-PA1-40-730-U-T2U  
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: 5044 lumens  
Efficiency: N/A  
Efficacy: 123.0 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): 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

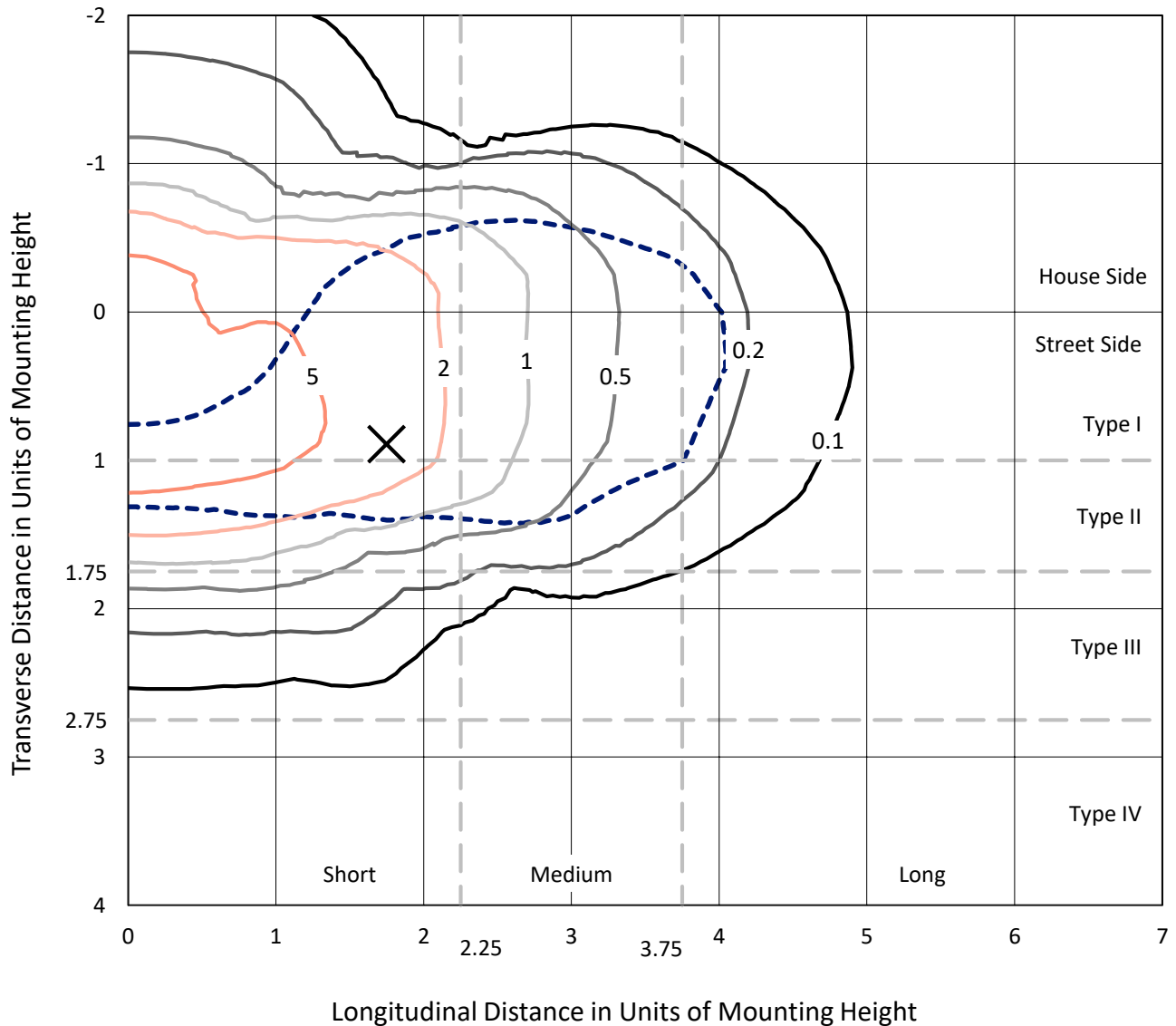


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### Iso-Footcandle Lines of Horizontal Illumination

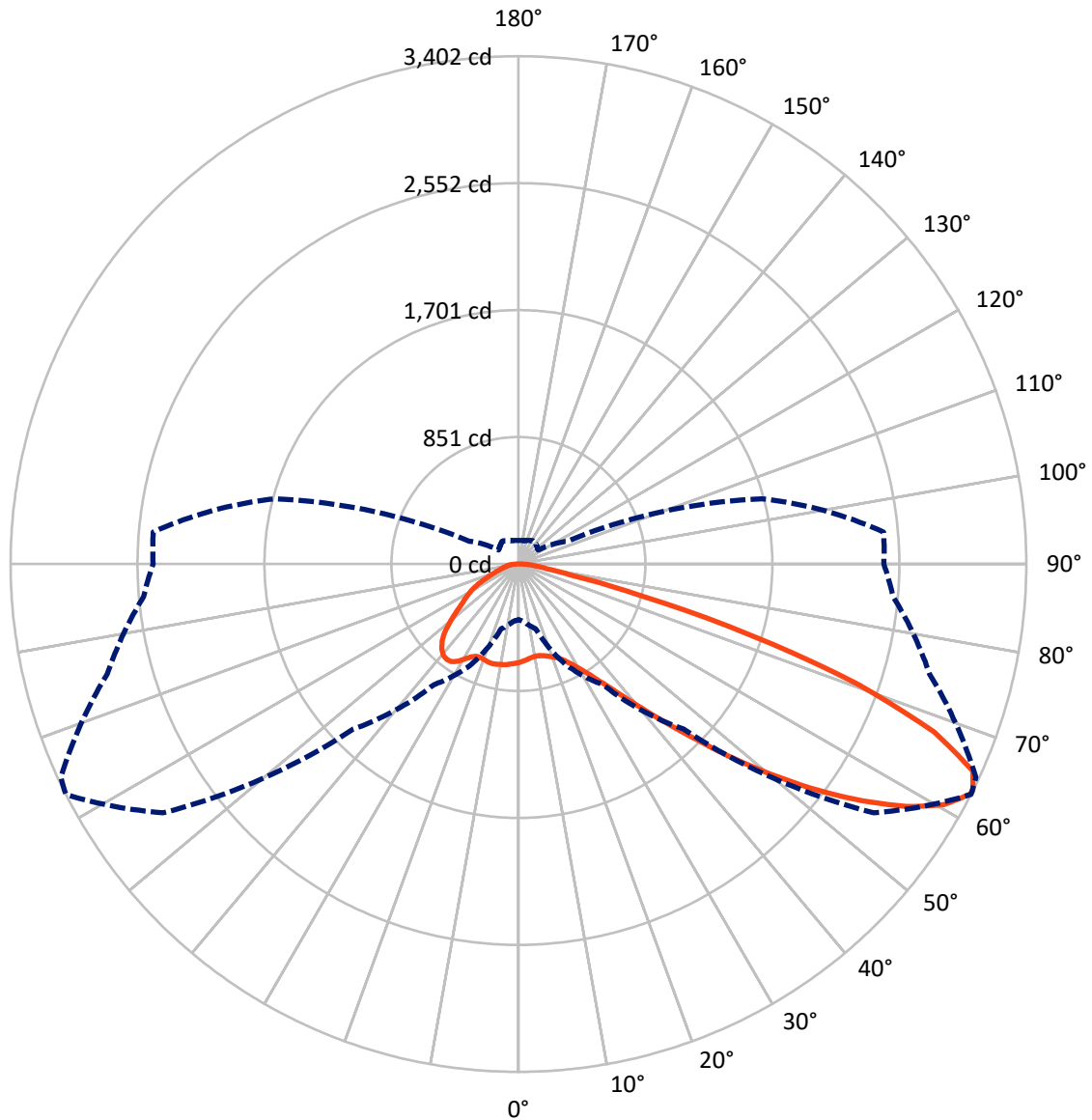
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.7 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	1440.0	0.0	1440.0
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	3604.0	0.0	3604.0
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	5044.0	0.0	5044.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.7	1.2
10°-20°	184.9	3.7
20°-30°	324.7	6.4
30°-40°	547.3	10.9
40°-50°	958.8	19.0
50°-60°	1239.2	24.6
60°-70°	1072.6	21.3
70°-80°	556.8	11.0
80°-90°	97.0	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°	5044.0	100.0
0°-180°	5044.0	100.0



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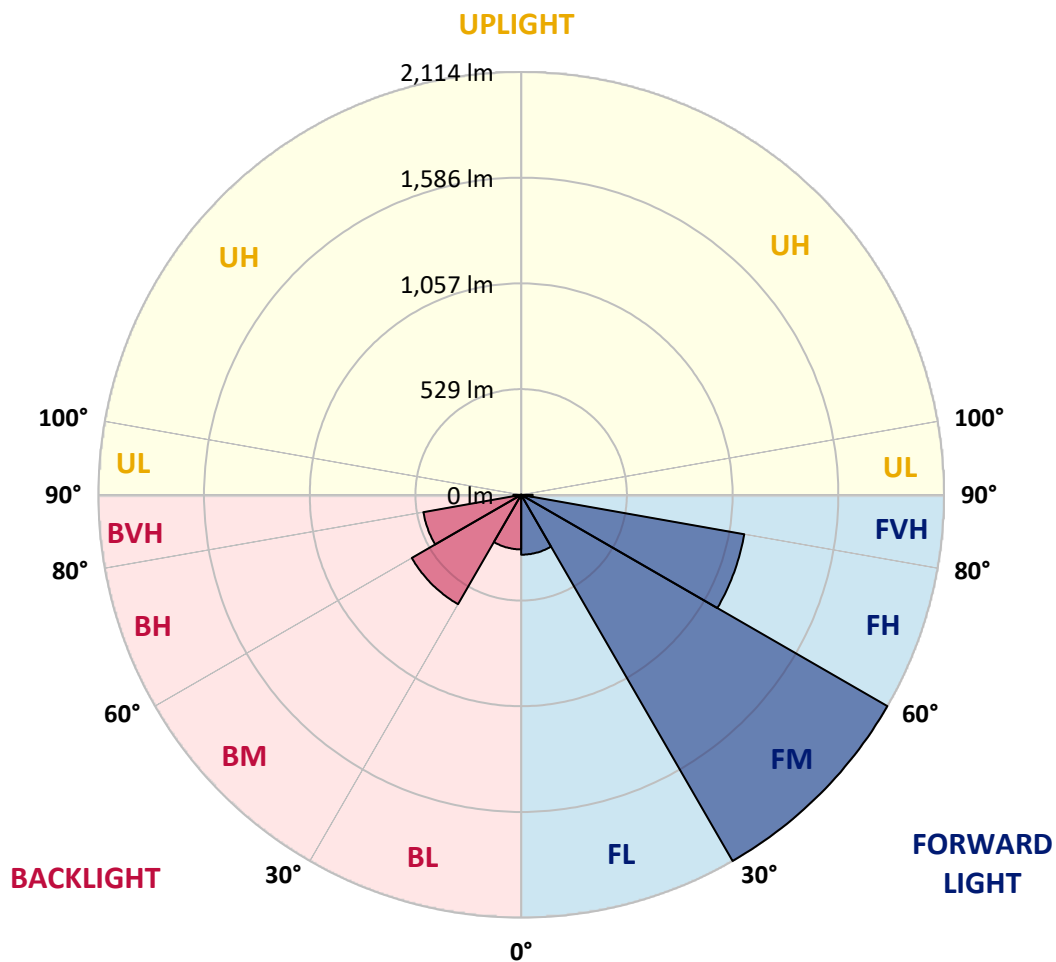
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	299.4	5.9			
FM	(30°-60°)	2114.0	41.9			
FH	(60°-80°)	1132.7	22.5			G1/1800
FVH	(80°-90°)	57.8	1.1			G1/100
BL	(0°-30°)	272.8	5.4	B1/500		
BM	(30°-60°)	631.2	12.5	B1/1000		
BH	(60°-80°)	496.7	9.8	B1/500		G1/500
BVH	(80°-90°)	39.2	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°	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4
2.5°	644.8	642.9	646.2	647.7	647.2	650.0	650.0	650.5	650.5	652.9	655.2
5°	625.9	625.0	628.3	630.7	632.6	636.8	639.6	641.1	642.5	645.8	651.4
7.5°	608.0	606.6	611.3	613.2	616.0	622.2	628.8	632.6	634.4	641.5	649.5
10°	593.4	592.9	596.7	598.6	601.9	610.8	620.3	628.3	629.7	639.2	646.7
12.5°	586.3	585.4	589.6	592.0	597.6	608.5	619.3	629.3	631.6	642.5	649.1
15°	592.0	592.9	596.7	597.2	603.8	615.1	627.4	637.3	639.6	650.5	655.2
17.5°	618.9	618.4	620.8	619.8	622.2	627.8	641.1	649.1	651.9	659.9	663.7
20°	667.5	666.1	668.0	661.8	651.4	648.6	656.6	665.6	666.5	671.3	668.9
22.5°	741.6	743.0	738.8	723.2	698.2	686.4	681.2	684.0	687.3	686.8	679.8
25°	838.4	843.1	835.1	807.7	765.7	738.3	719.4	715.2	717.5	710.9	700.1
27.5°	965.4	969.1	951.7	909.2	852.5	811.9	774.2	759.5	759.5	745.4	725.6
30°	1105.1	1107.4	1079.6	1025.8	960.2	899.7	844.0	815.7	813.4	785.5	754.3
32.5°	1275.0	1268.4	1235.4	1168.8	1086.2	1003.1	931.4	888.4	883.7	841.7	802.0
35°	1494.5	1494.5	1426.1	1350.1	1249.5	1143.8	1049.4	982.8	978.1	930.4	879.0
37.5°	1732.9	1732.0	1670.1	1565.3	1445.0	1315.6	1189.6	1106.5	1095.6	1044.7	987.1
40°	1970.4	1962.3	1912.3	1812.7	1684.3	1536.5	1362.8	1266.1	1260.9	1188.2	1115.9
42.5°	2144.1	2136.5	2112.9	2046.4	1961.9	1855.2	1588.0	1457.2	1449.7	1358.1	1269.8
45°	2239.9	2229.1	2225.7	2226.7	2236.1	2235.7	1866.0	1683.4	1656.9	1550.7	1433.2
47.5°	2218.2	2192.7	2226.7	2314.0	2460.8	2557.1	2189.9	1952.0	1902.9	1750.9	1607.4
50°	2043.1	2030.8	2103.5	2281.4	2583.1	2809.2	2546.3	2230.9	2161.5	1940.2	1772.1
52.5°	1735.8	1759.4	1849.0	2102.1	2560.9	2961.7	2870.1	2520.8	2424.5	2120.5	1915.1
55°	1381.7	1411.4	1538.0	1806.1	2355.6	2963.6	3103.8	2801.7	2715.7	2306.9	2061.5
57.5°	1005.5	1047.5	1205.6	1451.6	1995.4	2761.1	3219.0	3064.6	2966.4	2490.6	2204.5
60°	631.6	661.4	833.7	1118.8	1525.2	2314.0	3190.2	3275.1	3193.9	2663.8	2367.8
62.5°	406.9	421.1	495.7	798.7	1063.5	1697.0	2977.3	3396.0	3361.0	2822.0	2491.0
63°	372.9	385.2	448.9	738.3	986.1	1563.5	2905.5	3402.1	3381.3	2851.7	2519.8
65°	266.7	279.9	313.0	507.5	727.9	1048.9	2489.6	3345.0	3368.1	2901.3	2559.0
67.5°	210.5	214.8	229.9	308.3	516.4	595.7	1675.3	3003.7	3105.2	2848.4	2501.0
70°	188.4	191.7	208.6	236.5	390.9	386.1	873.8	2415.0	2625.1	2668.1	2354.6
72.5°	164.3	166.6	187.4	222.8	298.3	295.0	380.0	1623.9	1879.3	2337.6	2152.1
75°	136.0	138.3	155.8	197.8	252.6	233.2	237.9	848.8	1077.2	1832.5	1887.3
77.5°	111.9	113.3	127.9	159.1	222.3	179.9	184.1	356.9	523.5	1249.1	1490.3
80°	81.2	81.7	95.4	120.8	169.9	162.4	136.9	194.5	237.4	684.5	937.5
82.5°	56.6	57.1	71.3	84.5	117.1	161.9	99.6	130.3	142.6	315.3	417.3
85°	39.7	38.7	48.6	55.7	74.1	98.2	76.0	83.6	88.3	136.4	112.3
87.5°	17.5	17.0	27.4	29.7	37.3	45.3	60.4	43.9	46.7	66.1	35.4
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°	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4	660.4
2.5°	655.7	657.6	660.4	664.7	668.0	669.4	672.2	672.7	676.9	673.2	673.6
5°	654.7	657.1	663.2	670.8	676.0	679.8	686.8	689.2	693.5	691.6	691.1
7.5°	653.3	657.6	666.5	677.4	685.4	691.6	698.2	702.4	706.7	705.7	704.8
10°	651.4	656.6	669.4	680.2	691.6	698.2	702.9	703.4	704.8	703.8	701.5
12.5°	652.9	658.5	673.2	684.0	695.8	700.5	699.1	692.0	685.9	680.7	679.8
15°	657.6	664.2	677.9	687.8	697.2	694.4	685.9	670.3	659.0	652.4	652.9
17.5°	662.3	668.0	678.3	686.4	691.1	682.6	669.4	656.2	651.0	645.8	644.8
20°	666.5	667.5	674.1	681.2	680.7	674.1	661.8	645.8	635.4	626.9	627.4
22.5°	673.2	669.4	669.8	674.1	679.3	673.2	644.4	616.5	600.9	591.0	590.5
25°	688.3	680.2	672.7	675.0	694.9	655.7	607.1	570.7	557.0	548.1	549.0
27.5°	709.0	698.2	683.1	695.8	706.7	621.2	553.7	516.4	507.0	497.5	499.9
30°	731.7	716.1	697.7	740.7	693.5	566.5	487.6	453.6	445.1	436.2	438.1
32.5°	772.3	749.2	725.1	794.5	662.8	499.9	418.2	387.6	381.9	376.2	376.7
35°	839.8	812.4	786.4	835.5	623.1	430.5	355.9	334.2	329.5	322.9	322.9
37.5°	939.4	896.4	882.7	857.3	568.8	365.8	310.1	295.5	285.6	276.6	276.6
40°	1055.0	1004.1	993.2	863.9	498.0	312.0	278.0	265.3	252.1	238.9	239.8
42.5°	1195.7	1126.8	1101.8	854.9	412.1	277.6	255.4	240.7	228.0	216.7	214.8
45°	1354.3	1267.0	1203.7	828.9	334.2	256.3	240.7	223.3	207.2	197.3	195.4
47.5°	1516.2	1419.0	1293.9	777.0	279.5	241.2	230.8	206.3	195.0	188.4	187.4
50°	1671.1	1569.6	1368.5	695.3	247.8	230.4	216.2	198.3	188.8	183.2	182.7
52.5°	1808.4	1712.6	1431.3	610.8	226.6	221.4	209.6	194.5	184.6	179.4	178.4
55°	1939.2	1857.5	1493.6	535.3	208.2	206.3	206.3	190.7	179.9	175.1	174.2
57.5°	2082.7	2022.3	1556.4	480.1	191.7	195.4	202.0	186.5	174.7	170.4	169.9
60°	2248.4	2213.0	1622.5	431.5	177.0	183.6	195.9	180.8	168.5	165.2	164.3
62.5°	2417.9	2418.8	1679.6	372.9	164.7	174.7	188.8	175.6	162.9	160.5	160.0
63°	2447.6	2456.1	1687.6	360.2	161.9	172.8	186.9	173.7	161.4	159.1	158.6
65°	2520.8	2558.1	1694.2	306.4	151.5	165.7	179.9	167.6	155.3	154.8	153.9
67.5°	2503.3	2564.2	1653.1	240.3	139.7	155.8	169.9	158.6	147.8	147.8	145.9
70°	2373.0	2412.7	1527.1	185.5	130.8	145.4	158.1	149.2	137.8	138.8	135.0
72.5°	2173.3	2129.9	1256.1	144.9	119.9	133.6	144.4	136.9	127.0	126.0	121.8
75°	1880.7	1737.6	899.7	117.1	106.7	118.0	129.3	123.7	114.7	109.5	108.6
77.5°	1433.2	1233.5	539.1	99.1	95.4	104.8	111.9	107.6	100.5	94.4	94.9
80°	853.5	711.4	243.1	84.0	82.6	89.7	95.4	92.1	87.3	79.8	77.9
82.5°	345.5	275.2	109.0	68.0	69.9	75.1	80.2	77.4	73.6	71.8	60.9
85°	89.7	86.4	63.7	51.0	53.8	56.2	63.3	63.3	60.0	49.1	45.3
87.5°	25.5	34.0	35.4	32.1	36.3	36.8	43.9	43.9	44.8	30.2	27.4
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)