

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: P573131

Luminaire Tested: **ARCH-S-PA2-40-727-U-T2R**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573131
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-40-727-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5623 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

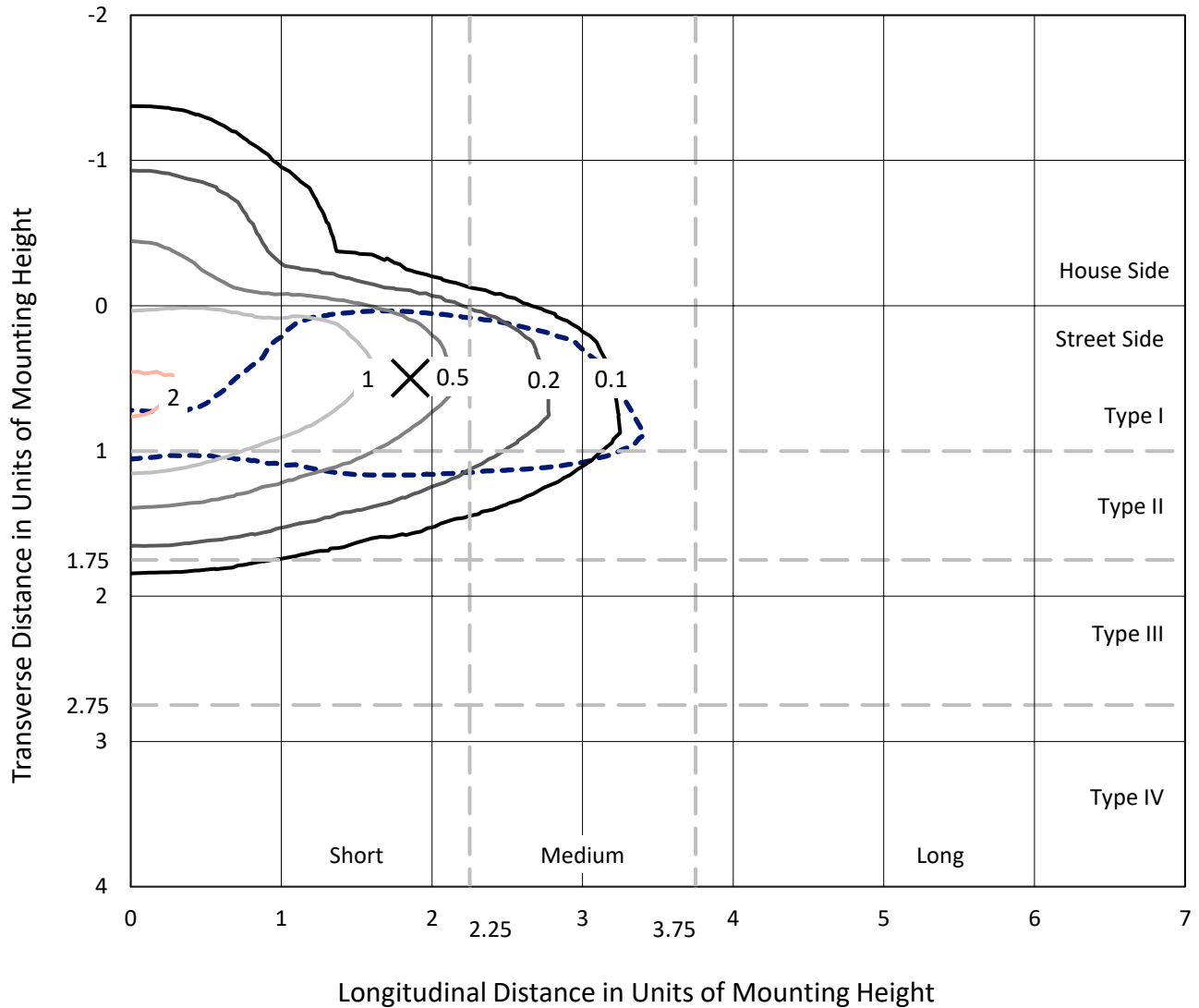
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

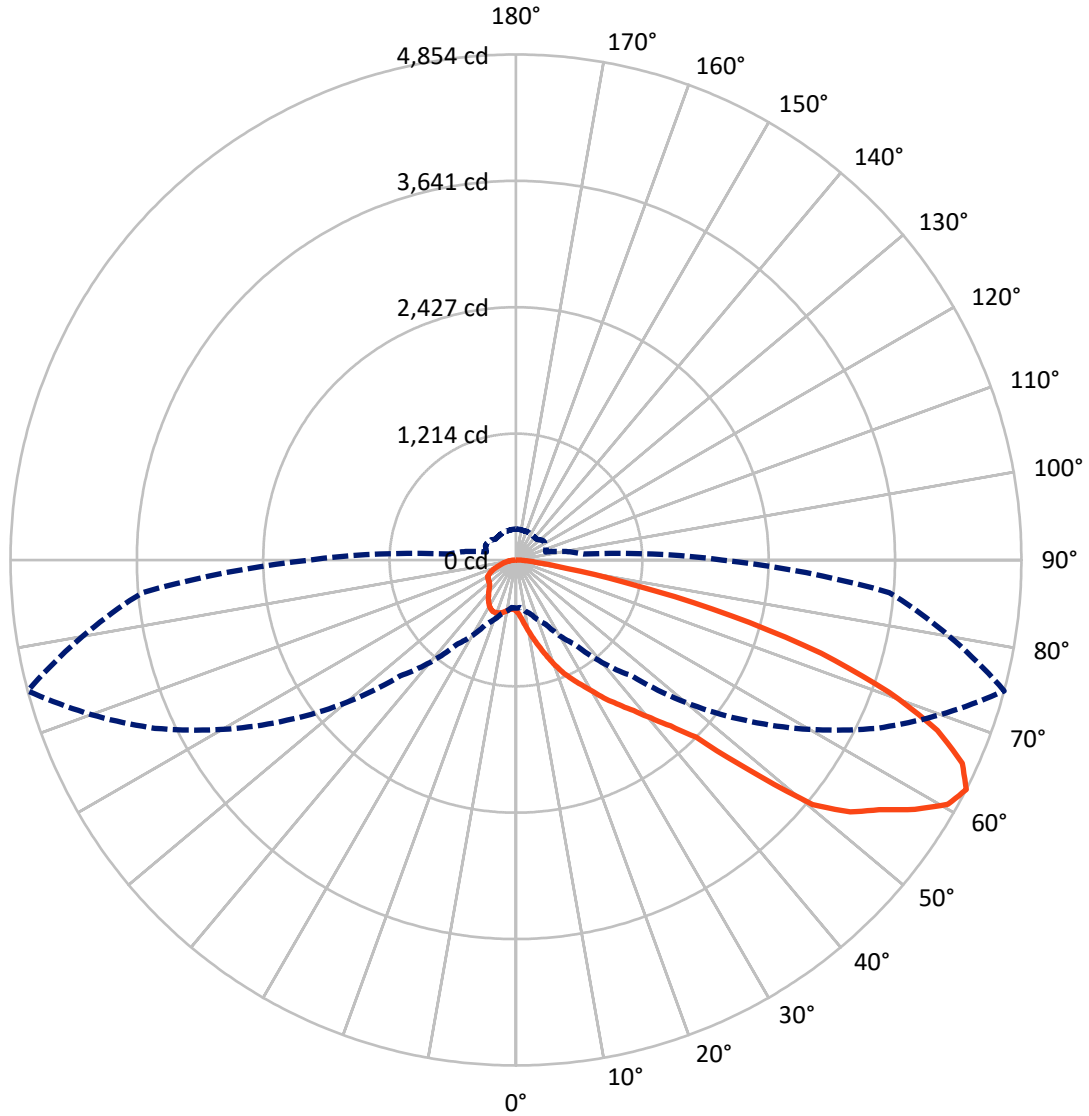
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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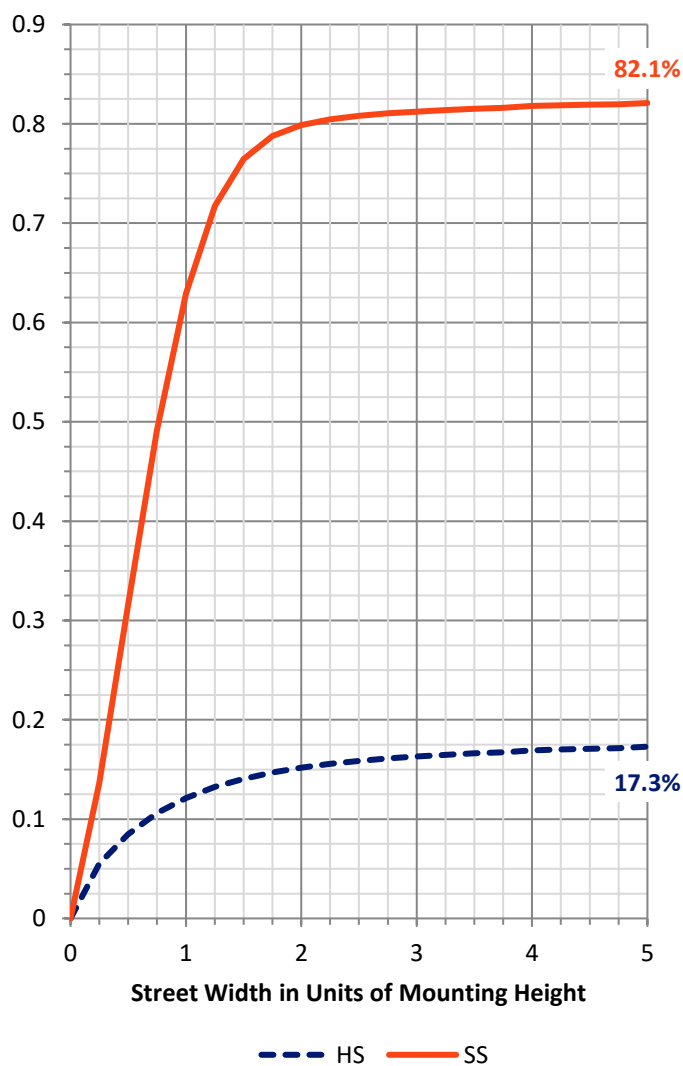
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	991.7	0.0	991.7
	% Fixture	17.6	0.0	17.6
Street Side	Lumens	4631.3	0.0	4631.3
	% Fixture	82.4	0.0	82.4
Total	Lumens	5623.0	0.0	5623.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	1.0
10°-20°	232.7	4.1
20°-30°	460.3	8.2
30°-40°	767.3	13.6
40°-50°	1132.2	20.1
50°-60°	1361.1	24.2
60°-70°	1057.8	18.8
70°-80°	468.0	8.3
80°-90°	84.7	1.5
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°	5623.0	100.0
0°-180°	5623.0	100.0

Coefficient of Utilization



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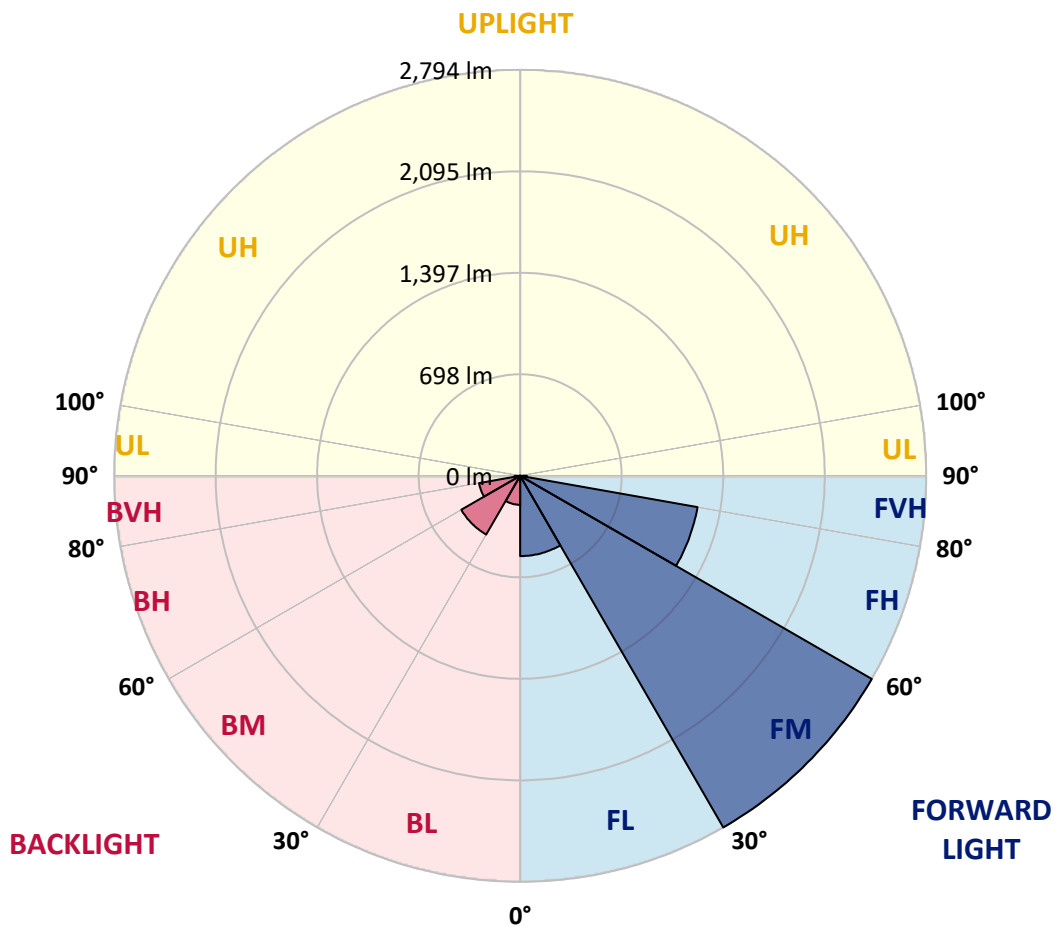
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	552.3	9.8			
FM (30°-60°)	2793.5	49.7			
FH (60°-80°)	1238.9	22.0			G1/1800
FVH (80°-90°)	46.6	0.8			G1/100
BL (0°-30°)	199.6	3.5	B1/500		
BM (30°-60°)	467.1	8.3	B1/1000		
BH (60°-80°)	286.9	5.1	B1/500		G1/500
BVH (80°-90°)	38.2	0.7			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°	65°	75°	85°	90°
0°	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1
2.5°	626.7	608.5	608.5	588.8	590.3	573.6	555.4	537.2	517.5	502.3	494.7
5°	819.4	805.8	801.2	778.5	742.0	701.1	657.1	611.5	564.5	528.1	509.9
7.5°	1000.0	989.4	983.3	957.5	907.4	863.4	793.6	710.2	629.7	561.5	534.1
10°	1133.5	1126.0	1113.8	1101.7	1065.3	1027.3	940.8	822.5	704.1	602.4	561.5
12.5°	1230.7	1220.0	1220.0	1218.5	1194.2	1159.3	1078.9	951.4	790.6	648.0	591.8
15°	1295.9	1294.4	1298.9	1308.0	1302.0	1279.2	1198.8	1069.8	878.6	699.5	626.7
17.5°	1344.5	1338.4	1347.5	1371.8	1390.0	1380.9	1314.1	1183.6	975.7	755.7	664.6
20°	1397.6	1385.4	1397.6	1427.9	1450.7	1464.3	1432.5	1292.9	1080.4	816.4	701.1
22.5°	1499.2	1497.7	1491.7	1500.8	1515.9	1540.2	1522.0	1403.6	1182.1	877.1	743.6
25°	1681.3	1664.7	1648.0	1628.2	1611.5	1619.1	1604.0	1506.8	1274.7	943.9	780.0
27.5°	1884.7	1866.5	1836.1	1787.6	1742.0	1714.7	1682.9	1596.4	1364.2	1004.6	814.9
30°	2071.3	2065.3	2019.7	1966.6	1887.7	1837.6	1776.9	1699.6	1471.9	1071.3	851.3
32.5°	2245.8	2233.7	2188.2	2132.0	2039.5	1983.3	1899.9	1811.8	1594.8	1153.3	889.2
35°	2396.1	2383.9	2330.8	2259.5	2179.1	2130.5	2034.9	1912.0	1707.1	1224.6	921.1
37.5°	2509.9	2496.2	2446.1	2376.3	2305.0	2282.3	2200.3	2039.5	1834.6	1314.1	960.6
40°	2573.6	2556.9	2523.5	2475.0	2415.8	2405.2	2370.3	2197.3	1995.5	1423.4	1018.2
42.5°	2581.2	2566.0	2547.8	2543.3	2538.7	2547.8	2564.5	2376.3	2179.1	1569.1	1103.2
45°	2514.4	2505.3	2506.8	2558.4	2629.8	2713.2	2813.4	2640.4	2426.4	1846.7	1294.4
47.5°	2371.8	2367.2	2400.6	2487.1	2646.4	2836.1	3119.9	3092.6	3012.2	2294.4	1540.2
50°	2141.1	2133.5	2204.9	2341.4	2569.1	2877.1	3326.3	3625.2	3692.0	2641.9	1701.1
52.5°	1810.3	1819.4	1930.2	2116.9	2391.5	2833.1	3411.2	3843.7	4019.7	2898.3	1824.0
55°	1471.9	1458.3	1558.4	1789.1	2129.0	2672.2	3427.9	3969.7	4232.2	3135.1	1943.9
57.5°	1072.8	1106.2	1212.4	1421.9	1790.6	2380.9	3330.8	4056.2	4517.5	3371.8	2054.6
60°	726.9	726.9	820.9	1030.4	1383.9	2027.3	3071.3	4024.3	4766.3	3556.9	2078.9
62.5°	462.8	458.3	534.1	682.9	990.9	1575.1	2682.9	3824.0	4854.3	3600.9	1977.2
65°	292.9	298.9	326.3	417.3	634.3	1118.4	2153.3	3424.9	4710.2	3499.3	1799.7
67.5°	235.2	236.7	250.4	288.3	390.0	717.8	1596.4	2874.1	4365.7	3242.8	1591.8
70°	207.9	210.9	214.0	227.6	267.1	453.7	1048.6	2314.1	3801.2	2796.7	1368.7
72.5°	189.7	192.7	195.8	198.8	220.0	295.9	619.1	1754.2	3066.8	2148.7	1044.0
75°	174.5	177.5	177.5	179.1	191.2	220.0	339.9	1209.4	2135.1	1336.9	651.0
77.5°	156.3	157.8	157.8	160.9	173.0	173.0	210.9	748.1	1185.1	605.5	329.3
80°	132.0	135.1	135.1	139.6	151.7	133.5	141.1	382.4	491.7	248.9	147.2
82.5°	97.1	103.2	106.2	113.8	121.4	101.7	101.7	192.7	207.9	110.8	78.9
85°	53.1	54.6	78.9	85.0	89.5	60.7	68.3	95.6	103.2	48.6	39.5
87.5°	15.2	16.7	37.9	47.0	42.5	25.8	28.8	36.4	36.4	13.7	10.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1	490.1
2.5°	488.6	476.5	465.9	458.3	450.7	446.1	444.6	441.6	441.6	443.1
5°	494.7	473.4	456.8	447.6	441.6	438.5	437.0	437.0	438.5	438.5
7.5°	509.9	478.0	462.8	455.2	449.2	446.1	446.1	444.6	446.1	446.1
10°	531.1	491.7	475.0	465.9	461.3	456.8	455.2	453.7	453.7	453.7
12.5°	553.9	506.8	488.6	478.0	470.4	464.3	461.3	458.3	456.8	456.8
15°	575.1	522.0	497.7	485.6	475.0	465.9	459.8	455.2	453.7	453.7
17.5°	597.9	532.6	503.8	487.1	473.4	461.3	453.7	447.6	444.6	444.6
20°	622.2	540.2	503.8	482.6	464.3	452.2	443.1	437.0	431.0	431.0
22.5°	641.9	543.2	497.7	471.9	453.7	438.5	429.4	421.9	417.3	417.3
25°	658.6	540.2	484.1	455.2	434.0	420.3	411.2	405.2	400.6	400.6
27.5°	669.2	528.1	467.4	437.0	417.3	403.6	397.6	391.5	388.5	388.5
30°	675.3	512.9	446.1	417.3	397.6	390.0	387.0	380.9	376.3	374.8
32.5°	678.3	490.1	424.9	397.6	383.9	380.9	380.9	373.3	367.2	365.7
35°	675.3	465.9	403.6	380.9	376.3	377.8	374.8	365.7	358.1	355.1
37.5°	670.7	437.0	380.9	368.7	373.3	376.3	367.2	355.1	342.9	339.9
40°	667.7	411.2	362.7	356.6	370.3	371.8	355.1	332.3	323.2	320.2
42.5°	682.9	385.4	346.0	347.5	362.7	364.2	333.8	323.2	317.1	315.6
45°	734.4	362.7	332.3	341.4	353.6	347.5	323.2	321.7	317.1	315.6
47.5°	773.9	346.0	326.3	336.9	346.0	324.7	321.7	320.2	315.6	314.1
50°	787.6	335.4	324.7	333.8	335.4	314.1	318.7	318.7	314.1	312.6
52.5°	789.1	329.3	327.8	332.3	318.7	309.6	315.6	315.6	311.1	309.6
55°	795.1	326.3	329.3	332.3	300.5	303.5	309.6	311.1	306.5	305.0
57.5°	783.0	321.7	332.3	333.8	292.9	297.4	303.5	303.5	303.5	303.5
60°	736.0	312.6	330.8	330.8	286.8	289.8	295.9	298.9	300.5	300.5
62.5°	649.5	294.4	321.7	321.7	280.7	283.8	291.4	291.4	295.9	295.9
65°	540.2	268.6	303.5	302.0	274.7	277.7	286.8	283.8	291.4	292.9
67.5°	450.7	236.7	276.2	279.2	268.6	276.2	282.2	271.6	286.8	286.8
70°	359.6	198.8	239.8	253.4	258.0	277.7	273.1	256.5	276.2	271.6
72.5°	279.2	168.4	197.3	221.5	245.8	276.2	253.4	235.2	247.3	239.8
75°	203.3	139.6	162.4	183.6	229.1	271.6	233.7	206.4	206.4	203.3
77.5°	142.6	113.8	130.5	145.7	212.4	259.5	209.4	177.5	170.0	168.4
80°	97.1	89.5	103.2	112.3	188.2	235.2	180.6	147.2	133.5	130.5
82.5°	63.7	63.7	69.8	75.9	145.7	195.8	141.1	109.3	141.1	135.1
85°	36.4	37.9	37.9	44.0	80.4	138.1	100.2	109.3	65.3	60.7
87.5°	12.1	12.1	12.1	12.1	16.7	56.1	42.5	39.5	15.2	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)