

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: P234691

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234691
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2R-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5939 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

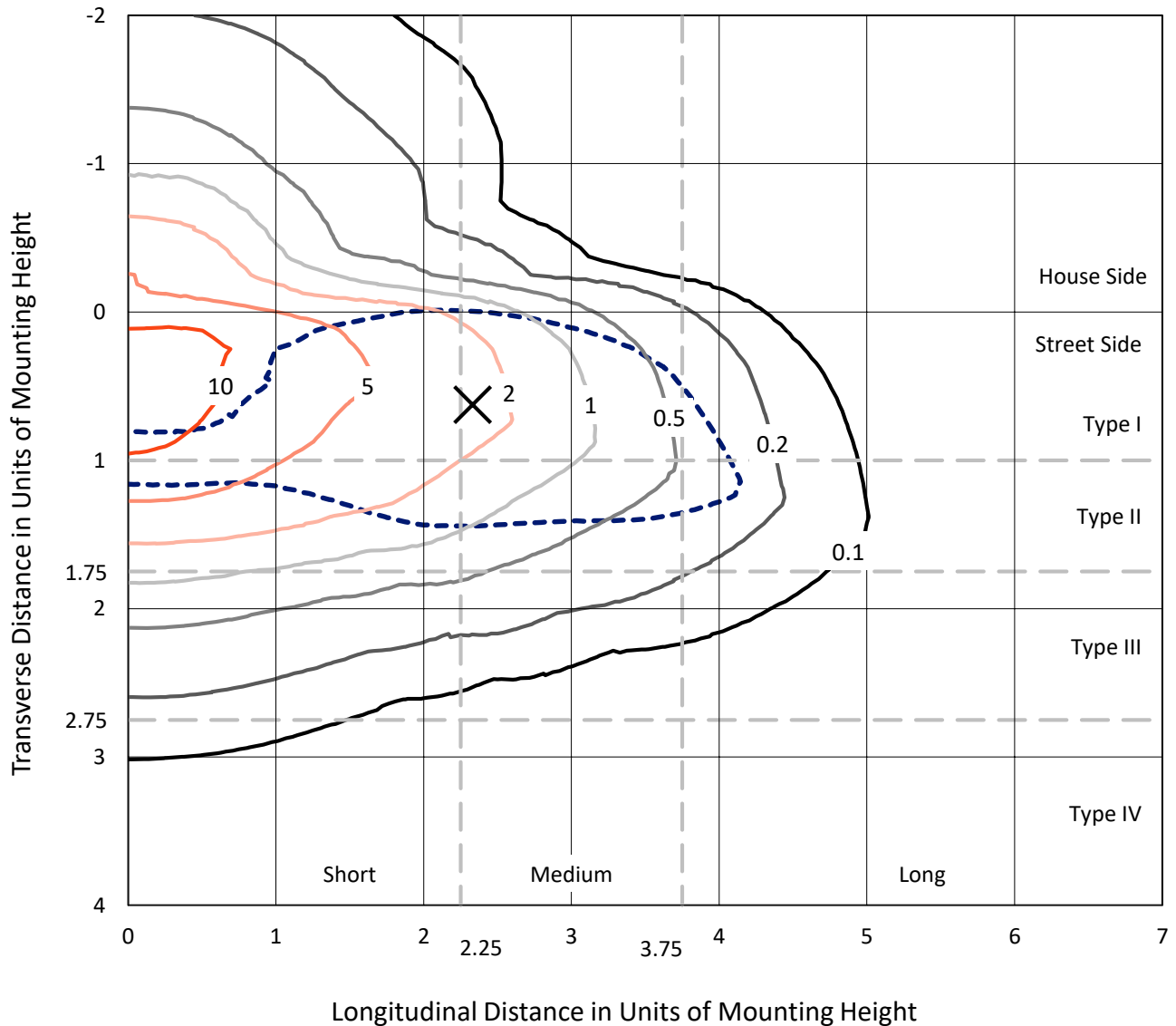
Input Watts (W): 64
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

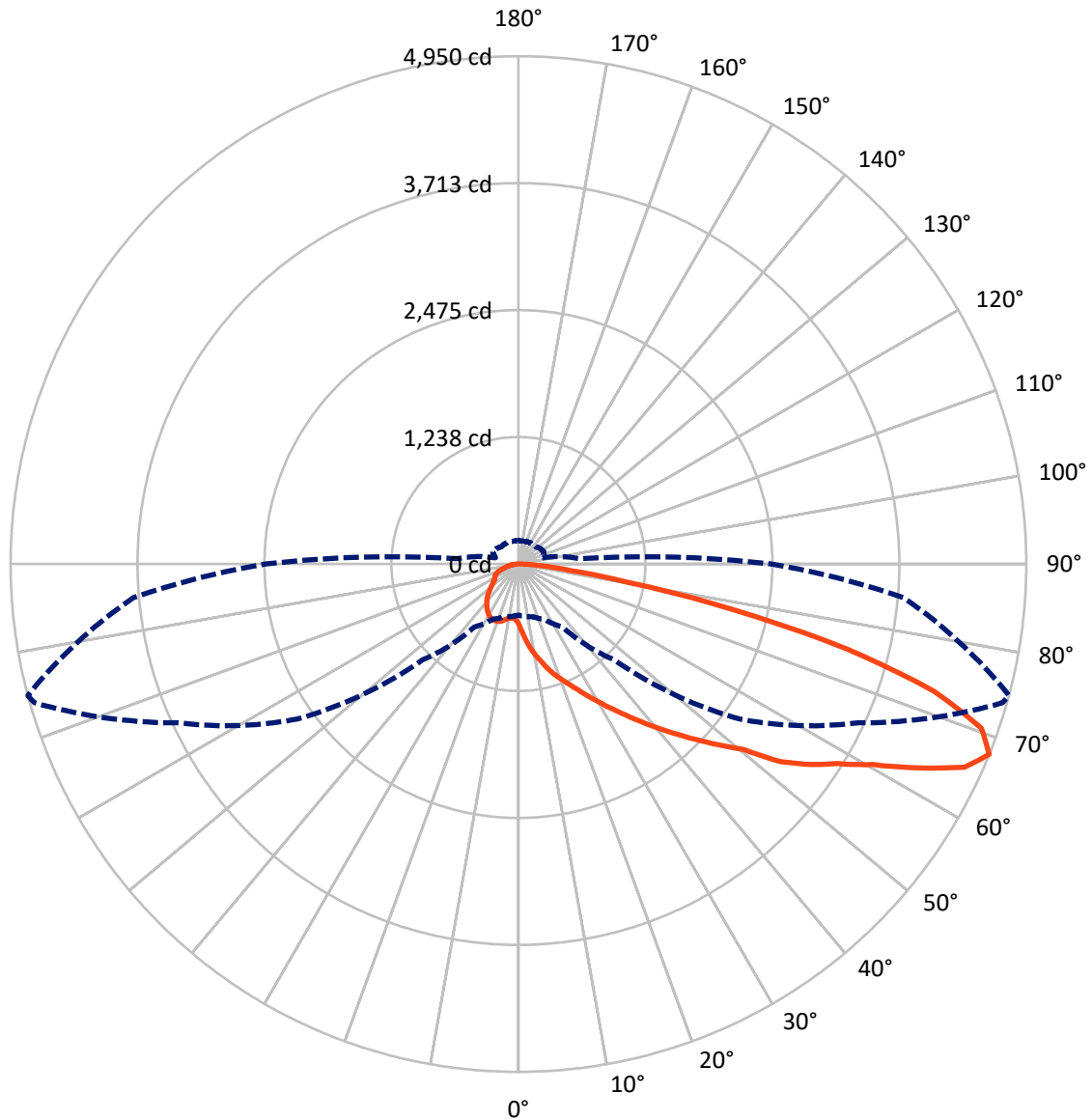
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.3 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1014.2	0.0	1014.2
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	4924.9	0.0	4924.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	5939.0	0.0	5939.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.2
10°-20°	249.9	4.2
20°-30°	455.7	7.7
30°-40°	748.0	12.6
40°-50°	1081.7	18.2
50°-60°	1274.8	21.5
60°-70°	1238.8	20.9
70°-80°	688.6	11.6
80°-90°	132.4	2.2
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°	5939.0	100.0
0°-180°	5939.0	100.0

Coefficient of Utilization



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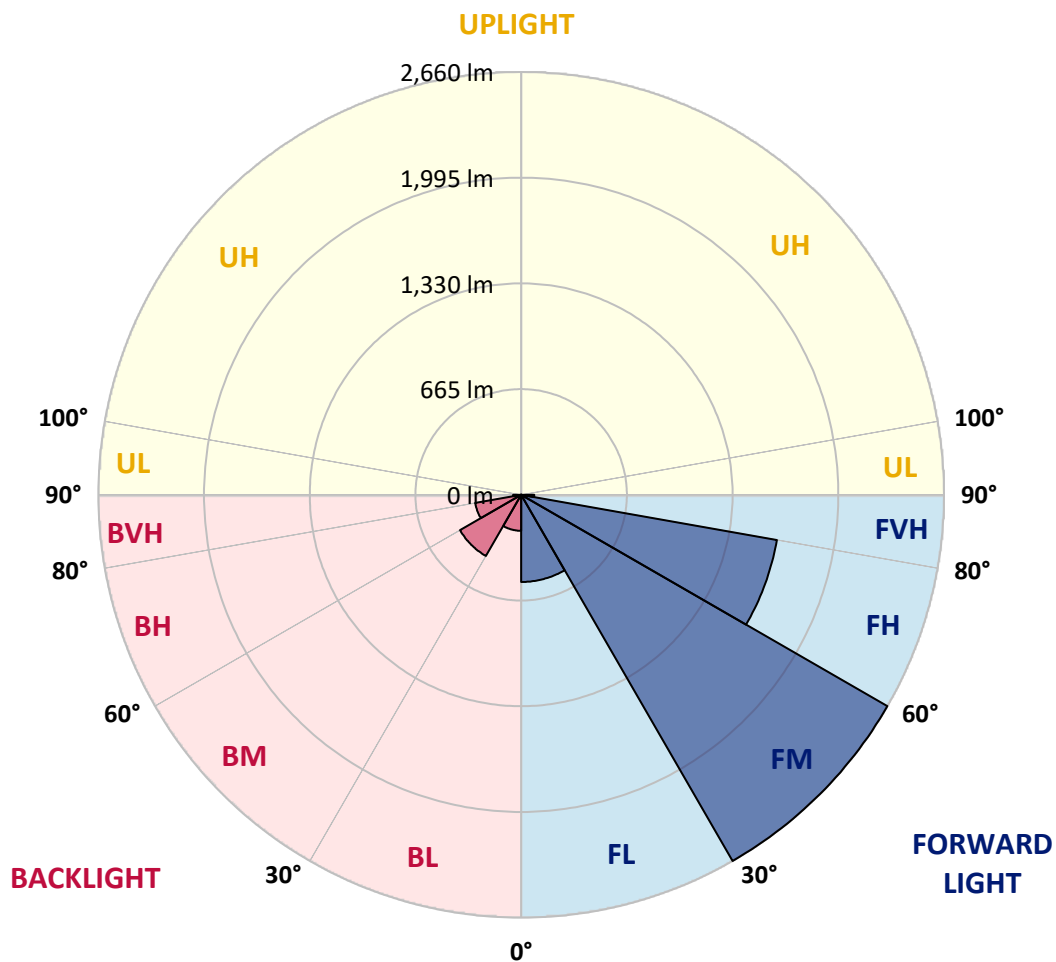
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	548.3	9.2			
FM (30°-60°)	2660.4	44.8			
FH (60°-80°)	1633.8	27.5			G1/1800
FVH (80°-90°)	82.4	1.4			G1/100
BL (0°-30°)	226.4	3.8	B1/500		
BM (30°-60°)	444.2	7.5	B1/1000		
BH (60°-80°)	293.6	4.9	B1/500		G1/500
BVH (80°-90°)	50.0	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5
2.5°	834.3	836.8	831.8	820.7	804.5	774.7	748.7	702.7	661.7	656.8	613.3
5°	980.8	983.3	977.1	963.4	946.1	913.8	877.8	818.2	752.4	740.0	648.1
7.5°	1081.4	1082.6	1075.2	1061.5	1047.9	1015.6	979.6	912.5	831.8	821.9	692.8
10°	1167.1	1169.5	1159.6	1150.9	1136.0	1103.7	1066.5	995.7	912.5	898.9	738.7
12.5°	1246.5	1249.0	1242.8	1235.3	1230.4	1200.6	1159.6	1075.2	985.8	970.9	793.4
15°	1299.9	1302.4	1303.6	1313.6	1319.8	1298.7	1257.7	1165.8	1065.3	1051.6	857.9
17.5°	1285.0	1291.2	1309.8	1345.8	1384.3	1385.6	1352.1	1255.2	1143.5	1128.6	923.7
20°	1241.6	1246.5	1268.9	1323.5	1399.2	1442.7	1440.2	1345.8	1216.7	1200.6	984.6
22.5°	1277.6	1283.8	1283.8	1317.3	1391.8	1472.5	1504.8	1435.2	1290.0	1275.1	1045.4
25°	1431.5	1435.2	1409.2	1395.5	1422.8	1497.3	1558.2	1532.1	1379.4	1362.0	1111.2
27.5°	1646.3	1640.1	1607.8	1553.2	1523.4	1543.3	1605.3	1624.0	1482.4	1461.3	1179.5
30°	1859.8	1856.1	1818.9	1745.6	1678.6	1636.4	1657.5	1705.9	1594.2	1569.3	1245.3
32.5°	2059.7	2053.5	2012.6	1926.9	1851.2	1772.9	1732.0	1780.4	1713.3	1684.8	1318.5
35°	2243.5	2227.3	2186.4	2097.0	2018.8	1944.3	1843.7	1851.2	1842.5	1812.7	1399.2
37.5°	2392.5	2380.1	2335.4	2252.2	2169.0	2098.2	1992.7	1931.9	1981.5	1953.0	1492.3
40°	2524.1	2510.4	2464.5	2381.3	2304.3	2237.3	2154.1	2029.9	2138.0	2105.7	1596.6
42.5°	2623.4	2613.5	2576.2	2494.3	2419.8	2359.0	2318.0	2154.1	2300.6	2269.6	1710.9
45°	2676.8	2666.9	2647.0	2581.2	2512.9	2465.7	2469.5	2301.8	2470.7	2444.6	1846.2
47.5°	2611.0	2618.4	2635.8	2623.4	2581.2	2558.8	2604.8	2454.6	2660.7	2635.8	1992.7
50°	2434.7	2442.1	2511.7	2597.3	2612.2	2639.5	2726.5	2630.9	2861.8	2841.9	2174.0
52.5°	2001.4	2042.4	2234.8	2439.7	2579.9	2692.9	2861.8	2892.8	3200.7	3200.7	2494.3
55°	1512.2	1548.2	1768.0	2125.5	2454.6	2697.9	2961.1	3070.4	3445.3	3450.3	2661.9
57.5°	1225.4	1247.8	1355.8	1722.0	2191.3	2635.8	3079.1	3223.1	3648.9	3671.3	2877.9
60°	994.5	1006.9	1077.7	1332.2	1827.6	2468.2	3163.5	3441.6	3939.5	3970.5	3153.5
62.5°	799.6	812.0	859.2	1011.9	1434.0	2154.1	3148.6	3668.8	4326.8	4377.7	3514.8
65°	638.2	651.8	682.9	777.2	1062.8	1764.2	2995.9	3785.5	4727.8	4777.5	3754.5
67.5°	497.9	510.3	531.4	593.5	748.7	1319.8	2634.6	3662.6	4907.9	4950.1	3766.9
70°	376.2	382.4	399.8	439.5	535.1	876.5	2062.2	3250.4	4746.5	4784.9	3518.6
72.5°	291.8	290.5	300.5	320.3	373.7	603.4	1367.0	2643.3	4196.5	4236.2	3002.1
75°	238.4	237.1	243.3	249.6	270.7	404.7	807.0	1990.2	3387.0	3311.2	2252.2
77.5°	201.1	199.9	206.1	207.3	216.0	279.3	459.4	1309.8	2259.6	2129.3	1268.9
80°	170.1	168.9	176.3	178.8	185.0	204.9	264.5	708.9	1134.8	1075.2	605.9
82.5°	127.9	132.8	146.5	152.7	160.2	151.5	163.9	312.9	526.4	502.8	263.2
85°	62.1	73.3	110.5	122.9	131.6	95.6	111.7	147.7	237.1	226.0	106.8
87.5°	21.1	18.6	65.8	78.2	85.7	43.5	62.1	81.9	98.1	89.4	33.5
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°	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5
2.5°	594.7	576.1	548.8	527.7	514.0	502.8	497.9	496.6	494.1	492.9	492.9
5°	607.1	573.6	531.4	509.0	502.8	497.9	500.3	501.6	501.6	501.6	501.6
7.5°	625.7	578.6	527.7	512.8	511.5	511.5	519.0	522.7	525.2	525.2	525.2
10°	650.6	587.3	533.9	521.5	525.2	527.7	536.4	541.3	543.8	545.0	546.3
12.5°	684.1	605.9	546.3	536.4	541.3	542.6	548.8	551.3	553.7	555.0	555.0
15°	728.8	633.2	566.1	553.7	555.0	553.7	553.7	551.3	550.0	550.0	552.5
17.5°	774.7	659.3	583.5	566.1	561.2	551.3	543.8	537.6	533.9	531.4	532.6
20°	820.7	682.9	593.5	568.6	555.0	538.8	525.2	516.5	511.5	506.6	509.0
22.5°	866.6	705.2	597.2	561.2	541.3	517.7	502.8	489.2	478.0	470.5	471.8
25°	917.5	730.0	597.2	552.5	522.7	497.9	479.2	456.9	440.8	434.5	437.0
27.5°	968.4	751.1	591.0	536.4	501.6	476.8	449.4	423.4	413.4	409.7	411.0
30°	1019.3	767.3	577.3	516.5	479.2	451.9	415.9	398.5	386.1	376.2	377.4
32.5°	1070.2	778.5	558.7	491.7	455.7	420.9	391.1	371.2	348.9	336.5	337.7
35°	1128.6	787.1	536.4	466.8	429.6	393.6	371.2	338.9	315.4	305.4	302.9
37.5°	1189.4	793.4	512.8	439.5	403.5	373.7	351.4	311.6	289.3	275.6	274.4
40°	1255.2	795.8	484.2	411.0	378.7	361.3	325.3	295.5	257.0	248.3	248.3
42.5°	1333.4	794.6	455.7	382.4	351.4	332.7	306.7	293.0	259.5	250.8	245.8
45°	1422.8	794.6	424.6	348.9	324.0	296.7	285.6	276.9	254.5	258.2	260.7
47.5°	1524.6	792.1	387.4	321.6	301.7	278.1	271.9	253.3	244.6	247.1	249.6
50°	1664.9	795.8	353.8	299.2	285.6	265.7	258.2	248.3	244.6	245.8	244.6
52.5°	1859.8	783.4	321.6	285.6	273.1	247.1	247.1	245.8	247.1	245.8	245.8
55°	1966.6	756.1	298.0	278.1	264.5	238.4	243.3	245.8	248.3	247.1	247.1
57.5°	2118.1	737.5	279.3	273.1	259.5	235.9	240.9	245.8	247.1	245.8	245.8
60°	2296.9	725.1	266.9	274.4	255.8	235.9	242.1	245.8	244.6	243.3	243.3
62.5°	2504.2	720.1	258.2	278.1	252.0	237.1	242.1	245.8	240.9	239.6	239.6
65°	2582.4	675.4	247.1	280.6	254.5	237.1	240.9	242.1	235.9	234.7	233.4
67.5°	2462.0	598.4	230.9	275.6	262.0	237.1	237.1	235.9	228.4	227.2	224.7
70°	2192.6	496.6	206.1	259.5	266.9	238.4	232.2	226.0	218.5	218.5	213.5
72.5°	1795.3	391.1	173.8	230.9	263.2	242.1	222.2	213.5	204.9	204.9	199.9
75°	1293.7	291.8	139.1	192.4	247.1	240.9	209.8	198.6	188.7	187.5	181.3
77.5°	737.5	204.9	113.0	150.2	219.8	234.7	198.6	181.3	170.1	166.4	162.6
80°	378.7	137.8	91.9	117.9	182.5	217.3	190.0	161.4	149.0	142.8	136.6
82.5°	180.0	91.9	70.8	86.9	137.8	190.0	178.8	139.1	125.4	117.9	110.5
85°	80.7	54.6	47.2	55.9	98.1	147.7	157.7	114.2	98.1	122.9	90.6
87.5°	26.1	24.8	24.8	26.1	47.2	64.6	115.5	84.4	78.2	64.6	54.6
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)