

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: P214871

Luminaire Tested: **ARCH-AF24-60-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
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-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7727.4 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 64
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

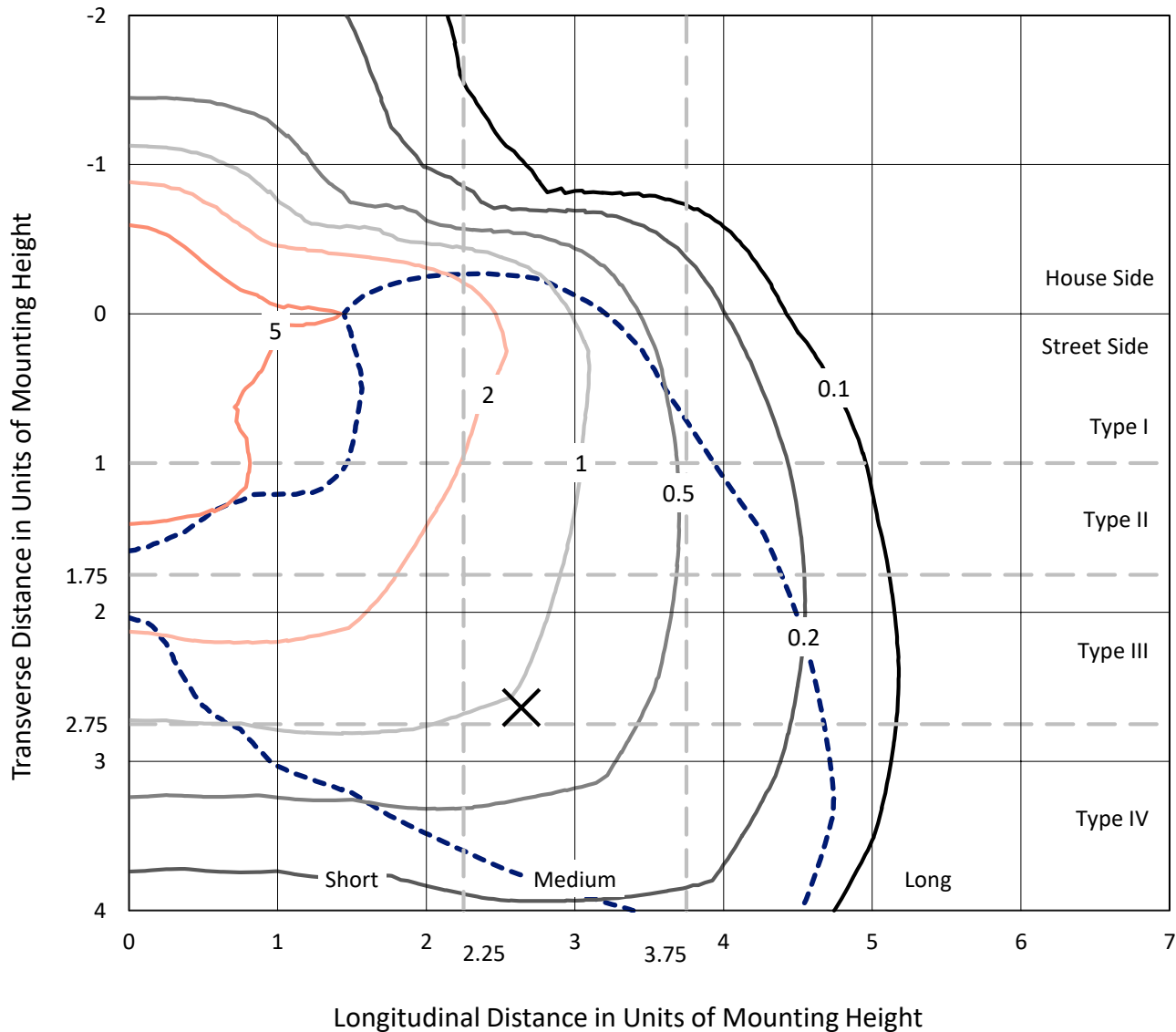


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

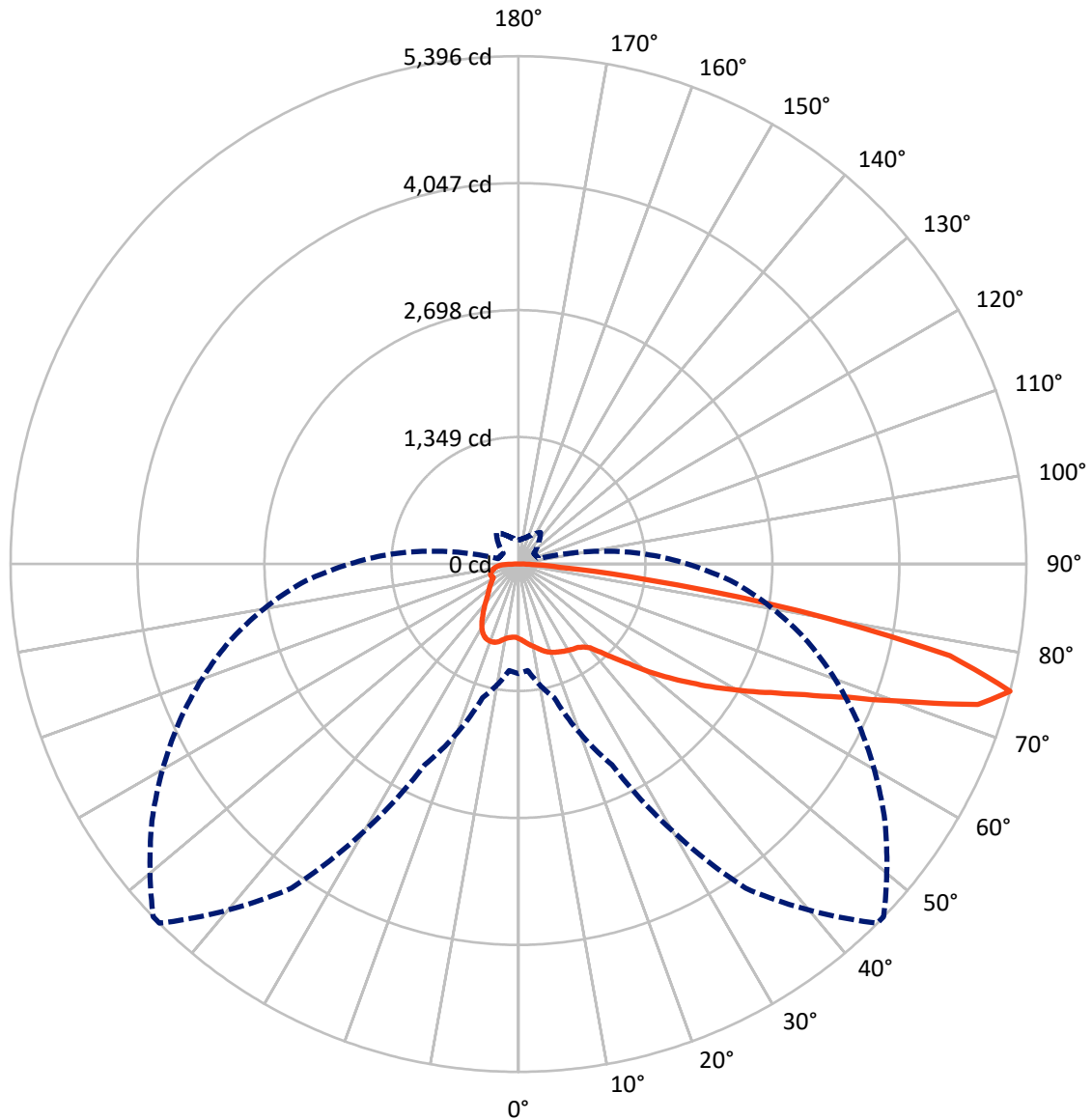


Based on 10 foot mounting height. Maximum calculated value = 9.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1790.1	0.0	1790.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5937.3	0.0	5937.3
	% Fixture	76.8	0.0	76.8
Total	Lumens	7727.4	0.0	7727.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.5	1.0
10°-20°	254.4	3.3
20°-30°	436.5	5.6
30°-40°	610.5	7.9
40°-50°	895.6	11.6
50°-60°	1395.1	18.1
60°-70°	2007.5	26.0
70°-80°	1748.8	22.6
80°-90°	300.3	3.9
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°	7727.4	100.0
0°-180°	7727.4	100.0



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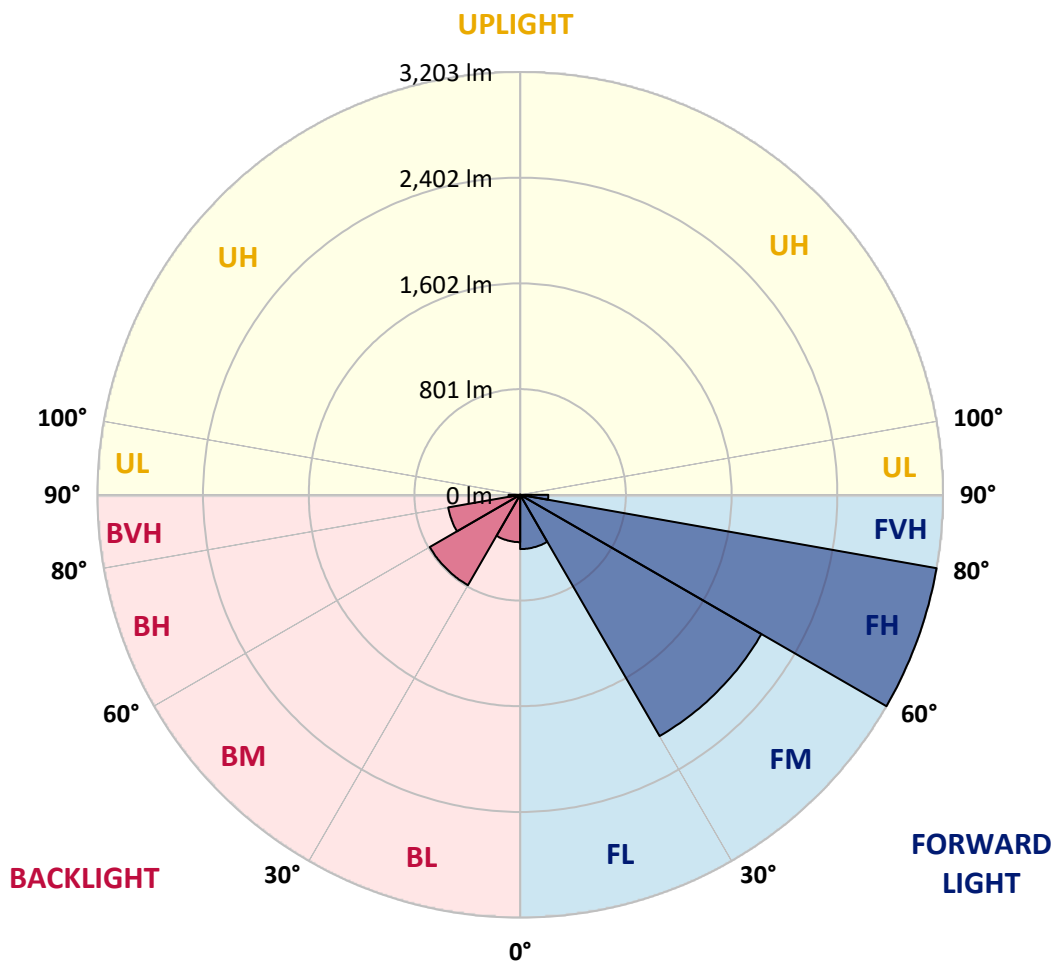
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	410.9	5.3			
FM (30°-60°)	2110.2	27.3			
FH (60°-80°)	3203.1	41.5			G2/5000
FVH (80°-90°)	213.1	2.8			G2/225
BL (0°-30°)	358.5	4.6	B1/500		
BM (30°-60°)	791.1	10.2	B1/1000		
BH (60°-80°)	553.2	7.2	B2/1000		G2/1000
BVH (80°-90°)	87.2	1.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2
2.5°	831.2	825.2	825.2	820.7	820.7	813.2	810.2	808.7	801.2	796.7	792.2
5°	879.3	871.9	870.3	859.8	855.3	838.7	837.3	826.7	813.2	799.6	789.2
7.5°	922.9	918.4	910.9	900.4	886.9	865.8	864.3	847.8	825.2	807.2	792.2
10°	954.5	951.5	941.0	927.4	912.4	891.4	889.9	871.9	844.8	823.8	802.7
12.5°	992.1	987.6	974.1	956.0	939.5	919.9	918.4	903.4	873.3	846.3	819.2
15°	1028.2	1022.1	1005.7	987.6	969.6	953.0	953.0	936.5	904.9	873.3	841.8
17.5°	1046.2	1043.2	1026.6	1007.1	992.1	980.1	978.6	963.5	931.9	898.9	864.3
20°	1052.2	1053.7	1038.7	1017.6	1007.1	1001.1	999.6	989.1	954.5	922.9	889.9
22.5°	1050.7	1055.2	1043.2	1020.6	1017.6	1017.6	1017.6	1005.7	978.6	946.9	913.9
25°	1056.7	1062.7	1053.7	1026.6	1026.6	1032.7	1032.7	1026.6	1002.6	975.6	942.4
27.5°	1077.8	1082.3	1074.7	1037.2	1038.7	1047.7	1046.2	1047.7	1032.7	1007.1	974.1
30°	1103.4	1109.3	1100.3	1053.7	1052.2	1061.2	1061.2	1068.8	1058.2	1031.1	1004.1
32.5°	1172.5	1171.0	1142.4	1071.7	1067.2	1076.2	1076.2	1083.8	1077.8	1056.7	1031.1
35°	1378.4	1355.8	1292.7	1130.4	1085.2	1089.7	1089.7	1103.4	1106.3	1089.7	1067.2
37.5°	1588.8	1581.3	1533.2	1286.7	1151.4	1118.4	1116.9	1136.4	1149.9	1136.4	1121.4
40°	1800.8	1794.8	1784.2	1495.7	1289.7	1169.4	1164.9	1181.5	1205.5	1196.5	1187.5
42.5°	1997.7	1994.7	2005.2	1701.6	1465.6	1279.2	1265.7	1246.2	1280.7	1277.7	1277.7
45°	2152.5	2160.1	2166.1	1894.0	1656.5	1420.5	1404.0	1337.8	1384.4	1396.4	1405.4
47.5°	2239.8	2245.7	2266.8	2081.9	1847.3	1584.3	1572.3	1464.0	1525.7	1561.7	1587.3
50°	2364.4	2348.0	2366.0	2265.2	2077.4	1797.7	1764.7	1634.0	1712.1	1775.2	1835.4
52.5°	2484.7	2457.6	2472.7	2477.2	2338.9	2006.7	1972.1	1833.8	1931.5	2030.8	2137.5
55°	2593.0	2591.4	2606.5	2683.1	2591.4	2230.6	2191.6	2054.8	2196.1	2302.9	2483.2
57.5°	2680.1	2695.2	2761.4	2922.2	2883.1	2474.2	2430.6	2311.9	2478.7	2585.4	2884.5
60°	2782.3	2806.4	2916.1	3125.1	3149.2	2729.7	2684.6	2599.0	2768.8	2877.0	3349.0
62.5°	2816.9	2851.5	3076.9	3338.5	3427.2	3009.3	2968.7	2911.6	3074.0	3171.7	3812.0
65°	2586.9	2653.1	3165.6	3448.3	3726.3	3346.1	3311.5	3261.9	3377.6	3442.2	4126.2
67.5°	2523.8	2553.9	2992.7	3606.1	4007.4	3779.0	3744.4	3658.7	3661.7	3634.6	4228.4
70°	2435.1	2468.2	2815.5	3724.9	4410.2	4371.2	4329.1	4076.6	3921.8	3757.9	4026.9
72.5°	2074.3	2063.8	2426.1	3404.7	4604.2	5104.7	5055.1	4526.0	4114.1	3651.2	3398.7
75°	1164.9	1134.9	1471.6	2355.4	4204.3	5396.4	5394.8	4753.0	3978.9	3180.7	2313.4
77.5°	338.2	329.2	485.5	987.6	2830.4	4688.4	4745.5	4287.0	3320.5	2284.8	1270.2
80°	159.4	162.3	209.0	326.2	1208.5	3025.9	3189.7	2822.9	1984.2	1053.7	524.6
82.5°	100.8	102.2	142.8	210.4	511.1	1373.9	1509.2	1270.2	786.1	455.4	231.5
85°	63.1	63.1	94.7	138.3	305.1	438.9	476.5	432.9	336.8	248.1	126.2
87.5°	34.6	34.6	57.1	79.7	166.8	141.3	145.8	172.9	210.4	151.8	63.1
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°	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2	792.2
2.5°	790.6	787.7	783.2	781.6	780.1	778.7	780.1	783.2	780.1	780.1	781.6
5°	786.1	783.2	777.1	777.1	778.7	780.1	787.7	792.2	793.7	793.7	793.7
7.5°	786.1	781.6	777.1	778.7	781.6	787.7	799.6	807.2	813.2	814.7	814.7
10°	793.7	787.7	784.6	787.7	796.7	801.2	813.2	825.2	832.8	835.8	835.8
12.5°	807.2	801.2	801.2	807.2	819.2	825.2	835.8	844.8	853.8	858.3	858.3
15°	829.7	822.2	823.8	834.2	847.8	853.8	861.3	864.3	871.9	877.8	877.8
17.5°	850.8	843.3	846.3	858.3	867.4	870.3	874.8	873.3	876.4	880.9	882.4
20°	874.8	867.4	868.8	876.4	877.8	874.8	874.8	870.3	868.8	876.4	879.3
22.5°	898.9	891.4	889.9	885.4	877.8	870.3	865.8	861.3	858.3	865.8	868.8
25°	927.4	917.0	909.4	889.9	870.3	856.8	850.8	847.8	846.3	853.8	856.8
27.5°	959.0	948.5	926.0	883.8	852.3	829.7	825.2	825.2	828.3	832.8	835.8
30°	989.1	978.6	937.9	870.3	820.7	787.7	783.2	787.7	795.1	799.6	804.1
32.5°	1019.2	1008.6	945.5	849.3	774.2	732.0	729.1	736.5	748.6	751.6	754.6
35°	1059.8	1049.2	954.5	819.2	715.6	670.4	667.4	671.9	682.4	686.9	691.4
37.5°	1116.9	1110.8	968.0	786.1	661.4	611.8	602.7	599.8	605.8	604.3	610.3
40°	1192.0	1196.5	992.1	742.6	608.8	557.7	538.2	529.1	523.1	511.1	517.1
42.5°	1301.7	1304.8	1019.2	692.9	563.6	506.6	481.0	464.5	452.5	432.9	435.9
45°	1462.6	1437.0	1050.7	640.4	523.1	466.0	435.9	416.3	399.9	383.3	384.8
47.5°	1676.0	1597.8	1085.2	596.8	482.5	432.9	405.8	383.3	363.8	350.3	351.7
50°	1939.1	1797.7	1119.8	556.2	441.9	407.3	383.3	359.3	339.7	326.2	324.7
52.5°	2286.3	2038.3	1142.4	511.1	401.3	384.8	363.8	341.3	317.2	300.6	299.1
55°	2647.1	2317.9	1162.0	457.0	362.2	359.3	348.7	323.2	294.6	273.5	270.6
57.5°	3043.9	2617.0	1177.0	404.4	332.2	338.2	335.2	305.1	273.5	254.0	252.6
60°	3404.7	2926.7	1128.8	357.7	305.1	317.2	320.2	294.6	278.0	282.6	284.1
62.5°	3768.4	3165.6	945.5	323.2	287.1	303.6	329.2	327.7	320.2	327.7	329.2
65°	3899.2	3215.2	670.4	294.6	269.0	309.6	357.7	354.8	320.2	306.7	303.6
67.5°	3825.5	3067.9	450.9	272.1	255.5	317.2	387.8	354.8	308.1	290.1	284.1
70°	3475.3	2705.7	330.7	249.5	243.5	315.7	404.4	353.2	302.2	282.6	275.1
72.5°	2771.8	2087.8	266.1	228.5	225.5	308.1	413.4	350.3	296.1	275.1	266.1
75°	1794.8	1298.7	223.9	207.5	198.5	296.1	408.9	341.3	288.6	261.6	255.5
77.5°	832.8	559.1	190.9	183.4	172.9	278.0	395.4	323.2	272.1	246.5	239.0
80°	387.8	264.5	160.8	159.4	154.9	263.1	377.3	302.2	252.6	231.5	219.4
82.5°	207.5	159.4	130.7	130.7	135.2	245.0	354.8	276.6	227.0	216.5	184.8
85°	109.8	91.7	94.7	102.2	115.7	216.5	324.7	249.5	198.5	165.3	160.8
87.5°	55.6	58.6	58.6	69.2	88.7	175.8	267.6	205.9	168.4	135.2	132.3
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)