

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: P398099

Luminaire Tested: **ARCH-S-PA1-80-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8647 lumens
Efficiency: N/A
Efficacy: 104.2 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): 83
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

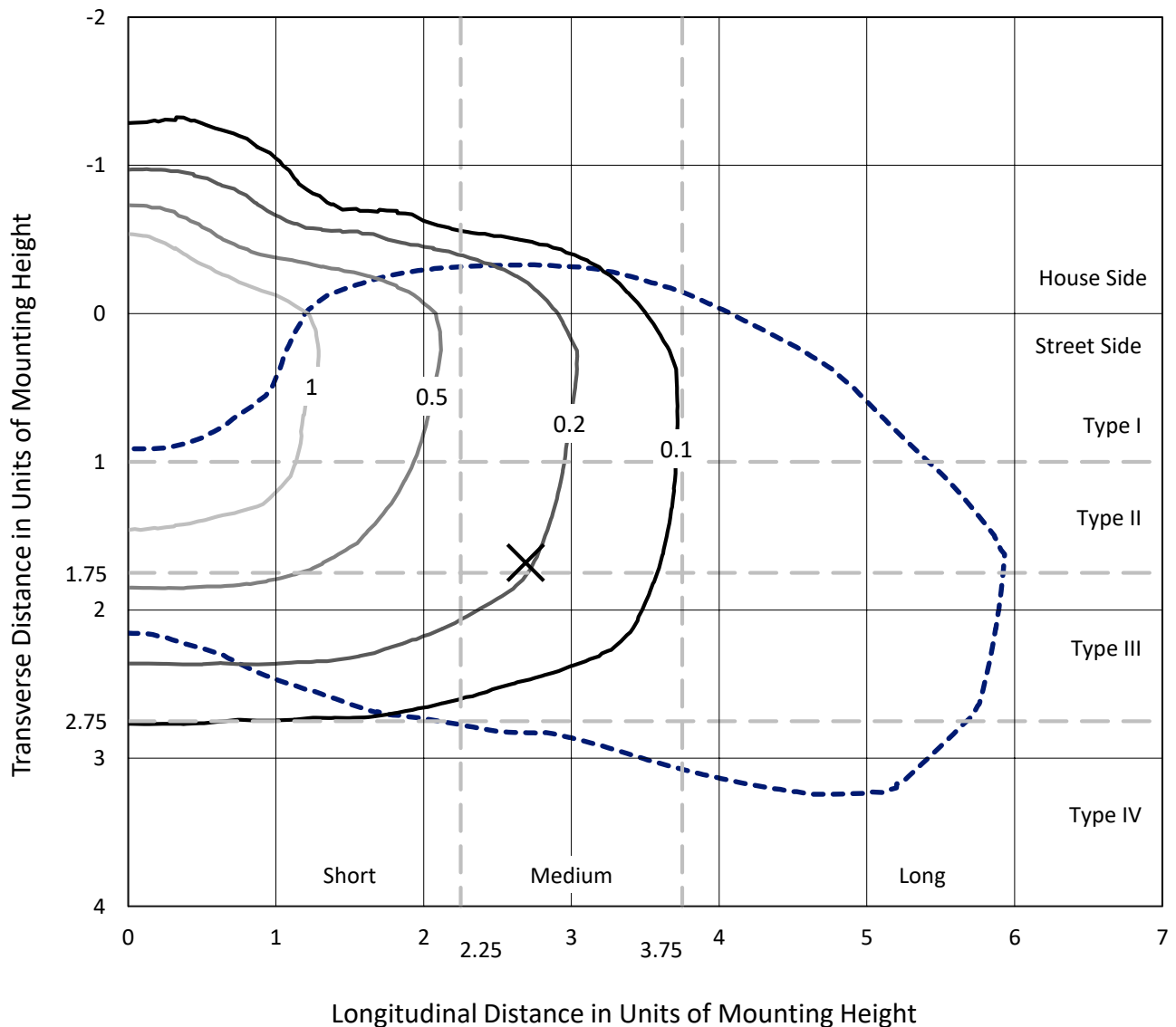


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

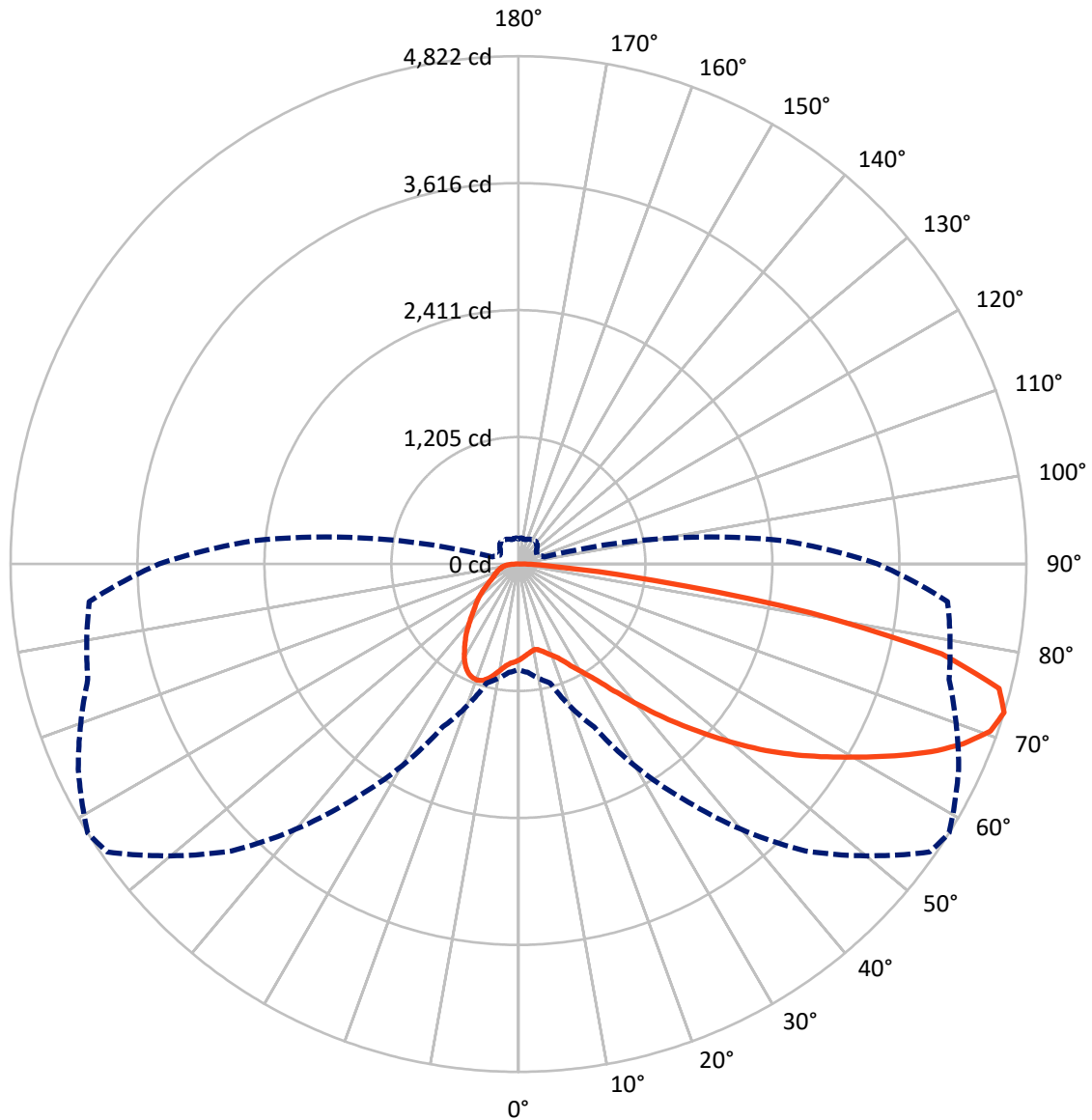


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1961.0	0.0	1961.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6686.0	0.0	6686.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	8647.0	0.0	8647.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	1.0
10°-20°	279.0	3.2
20°-30°	499.8	5.8
30°-40°	751.9	8.7
40°-50°	1217.6	14.1
50°-60°	1832.8	21.2
60°-70°	2157.0	24.9
70°-80°	1529.5	17.7
80°-90°	291.4	3.4
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°	8647.0	100.0
0°-180°	8647.0	100.0

Coefficient of Utilization



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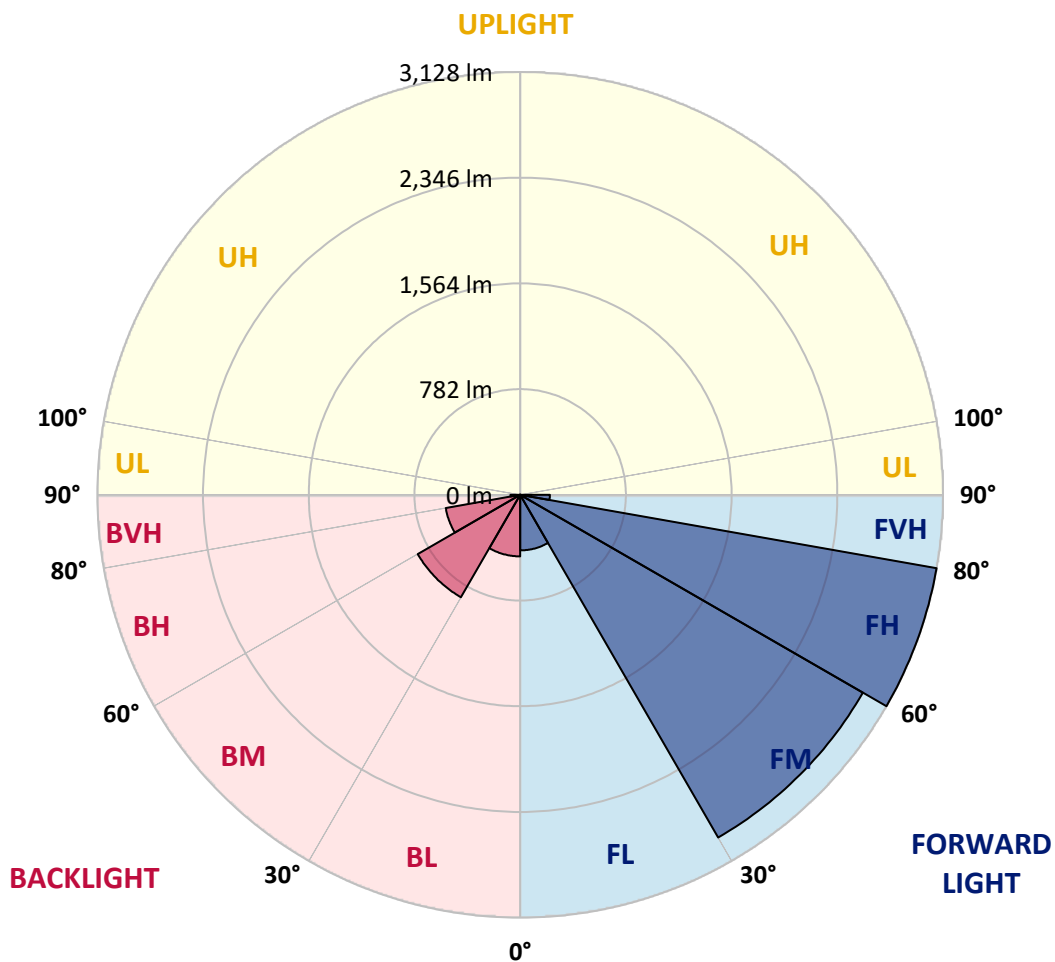
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	411.2	4.8			
FM	(30°-60°)	2927.3	33.9			
FH	(60°-80°)	3127.7	36.2			G2/5000
FVH	(80°-90°)	219.8	2.5			G2/225
BL	(0°-30°)	455.5	5.3	B1/500		
BM	(30°-60°)	875.0	10.1	B1/1000		
BH	(60°-80°)	558.9	6.5	B2/1000		G2/1000
BVH	(80°-90°)	71.6	0.8			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°	55°	58°	65°	75°	85°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	877.8	873.3	874.4	874.4	879.0	881.3	882.4	885.8	888.1	893.8	901.8
5°	836.7	833.3	834.5	835.6	843.6	851.6	858.4	863.0	869.8	879.0	890.4
7.5°	807.1	804.8	805.9	808.2	815.0	824.2	835.6	842.4	852.7	869.8	889.2
10°	785.4	785.4	786.5	791.1	797.9	809.3	818.5	826.5	847.0	877.8	907.5
12.5°	768.2	768.2	771.7	780.8	792.2	803.6	825.3	834.5	861.8	904.1	939.5
15°	767.1	768.2	769.4	777.4	789.9	815.0	847.0	860.7	893.8	944.0	985.1
17.5°	785.4	786.5	781.9	784.2	799.1	834.5	876.7	892.7	934.9	989.7	1031.9
20°	841.3	841.3	827.6	815.0	825.3	864.1	912.1	928.1	974.9	1035.4	1077.6
22.5°	955.5	961.2	929.2	901.8	885.8	907.5	950.9	968.0	1020.5	1085.6	1127.8
25°	1093.6	1099.3	1055.9	1017.1	987.4	984.0	1012.5	1030.8	1074.2	1141.5	1176.9
27.5°	1227.1	1216.9	1176.9	1140.4	1102.7	1071.9	1093.6	1109.6	1159.8	1211.2	1232.8
30°	1332.2	1324.2	1285.4	1259.1	1223.7	1183.8	1171.2	1188.3	1229.4	1277.4	1288.8
32.5°	1448.6	1442.9	1404.1	1369.8	1340.1	1302.5	1275.1	1283.1	1305.9	1340.1	1347.0
35°	1597.0	1609.5	1568.4	1498.8	1465.7	1429.2	1409.8	1412.1	1429.2	1450.9	1439.5
37.5°	1753.4	1768.2	1770.5	1660.9	1616.4	1583.3	1562.7	1570.7	1591.3	1606.1	1570.7
40°	2043.3	2028.5	1969.1	1888.1	1819.6	1787.6	1759.1	1757.9	1772.8	1799.0	1735.1
42.5°	2428.0	2414.3	2294.5	2189.4	2081.0	2044.5	1988.5	1964.6	1971.4	2004.5	1915.5
45°	2796.7	2791.0	2695.1	2573.0	2442.9	2372.1	2244.2	2186.0	2180.3	2206.6	2100.4
47.5°	3124.3	3099.2	3029.6	2934.8	2921.2	2736.2	2501.1	2422.3	2394.9	2409.7	2291.0
50°	3474.8	3389.2	3293.3	3235.1	3334.4	3162.0	2760.2	2678.0	2610.7	2620.9	2497.6
52.5°	3660.9	3517.0	3454.2	3471.4	3604.9	3538.7	3042.2	2941.7	2833.3	2848.1	2703.1
55°	3501.0	3499.9	3527.3	3633.5	3819.5	3743.0	3310.4	3197.4	3078.7	3082.1	2939.4
57.5°	3281.9	3326.4	3467.9	3702.0	4085.5	3957.7	3574.1	3454.2	3345.8	3328.7	3207.7
60°	3082.1	3131.2	3336.7	3690.5	4178.0	4154.0	3825.2	3720.2	3632.3	3582.1	3489.6
62.5°	2778.5	2815.0	3106.1	3617.5	4100.3	4295.5	4079.8	4007.9	3941.7	3837.8	3793.3
65°	2421.2	2433.7	2740.8	3376.6	4003.3	4350.3	4333.2	4301.2	4237.3	4084.4	4093.5
67.5°	2034.2	2059.3	2328.7	2991.9	3791.0	4325.2	4529.6	4555.8	4480.5	4251.0	4285.3
70°	1622.1	1652.9	1857.3	2460.0	3430.3	4216.8	4711.1	4753.3	4608.3	4305.8	4320.7
72.5°	1003.4	1033.1	1170.1	1708.9	2719.1	3852.6	4767.0	4821.8	4611.7	4232.8	4090.1
75°	347.0	350.4	457.7	819.6	1614.1	2908.6	4584.3	4713.3	4466.8	3966.8	3559.3
77.5°	158.7	164.4	203.2	337.9	715.7	1569.6	3785.3	4108.3	4026.1	3551.3	2739.6
80°	109.6	111.9	140.4	202.0	413.2	552.5	2389.2	2810.4	2954.3	2749.9	1755.7
82.5°	82.2	84.5	108.4	137.0	297.9	268.3	909.8	1305.9	1623.2	1593.6	734.0
85°	78.8	77.6	84.5	91.3	198.6	159.8	294.5	404.1	633.5	542.2	184.9
87.5°	34.2	37.7	86.8	51.4	103.9	74.2	127.9	149.5	192.9	167.8	66.2
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°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	905.2	907.5	914.4	924.6	930.3	941.8	949.7	954.3	957.7	958.9	958.9
5°	897.2	901.8	916.6	933.8	949.7	973.7	995.4	1008.0	1017.1	1020.5	1021.7
7.5°	899.5	910.9	932.6	957.7	978.3	1009.1	1035.4	1060.5	1081.0	1089.0	1089.0
10°	921.2	937.2	966.9	1000.0	1026.2	1058.2	1085.6	1107.3	1131.2	1144.9	1147.2
12.5°	954.3	973.7	1012.5	1049.1	1078.7	1103.9	1129.0	1144.9	1156.4	1166.6	1168.9
15°	1001.1	1025.1	1063.9	1101.6	1127.8	1143.8	1150.7	1150.7	1149.5	1150.7	1152.9
17.5°	1047.9	1070.7	1109.6	1147.2	1159.8	1150.7	1142.7	1140.4	1139.2	1137.0	1138.1
20°	1093.6	1115.3	1148.4	1176.9	1166.6	1134.7	1124.4	1123.3	1119.8	1117.5	1115.3
22.5°	1139.2	1155.2	1182.6	1192.9	1151.8	1106.1	1093.6	1086.7	1082.2	1076.5	1070.7
25°	1191.7	1196.3	1216.9	1200.9	1115.3	1053.6	1035.4	1025.1	1020.5	1014.8	1010.2
27.5°	1240.8	1240.8	1244.3	1188.3	1061.6	984.0	956.6	938.3	937.2	936.0	934.9
30°	1285.4	1279.6	1268.2	1150.7	992.0	898.4	857.3	839.0	845.9	851.6	852.7
32.5°	1337.9	1326.4	1294.5	1099.3	908.7	802.5	752.3	744.3	752.3	759.1	754.5
35°	1420.1	1399.5	1321.9	1039.9	828.7	714.6	666.6	655.2	652.9	651.8	642.7
37.5°	1537.6	1502.2	1343.6	976.0	750.0	637.0	601.6	577.6	555.9	533.1	529.7
40°	1681.5	1621.0	1358.4	902.9	666.6	571.9	534.2	503.4	466.9	426.9	422.4
42.5°	1839.0	1748.8	1365.3	821.9	593.6	518.3	471.4	432.6	391.5	360.7	355.0
45°	2009.1	1886.9	1359.6	744.3	534.2	472.6	420.1	377.8	344.7	323.1	318.5
47.5°	2174.6	2045.6	1343.6	682.6	488.6	433.8	380.1	341.3	316.2	292.2	286.5
50°	2386.9	2197.4	1324.2	634.7	438.3	395.0	355.0	313.9	285.4	274.0	271.7
52.5°	2622.1	2349.2	1301.3	574.2	389.3	364.1	339.0	302.5	293.4	271.7	268.3
55°	2876.6	2529.6	1296.8	497.7	345.9	342.5	323.1	312.8	315.1	271.7	266.0
57.5°	3144.9	2722.5	1307.0	421.2	310.5	323.1	329.9	321.9	318.5	277.4	266.0
60°	3424.6	2908.6	1276.2	350.4	283.1	307.1	337.9	317.3	292.2	275.1	267.1
62.5°	3696.2	3065.0	1142.7	300.2	262.5	302.5	333.3	300.2	271.7	271.7	268.3
65°	3893.7	3134.6	893.8	263.7	248.9	296.8	325.3	288.8	266.0	274.0	269.4
67.5°	3916.6	3062.7	600.4	235.2	237.4	286.5	307.1	278.5	260.3	280.8	274.0
70°	3776.1	2875.5	367.6	213.5	222.6	268.3	291.1	268.3	252.3	275.1	264.8
72.5°	3412.0	2526.2	259.1	195.2	206.6	251.1	276.2	259.1	240.9	248.9	238.6
75°	2799.0	1957.7	205.5	178.1	190.6	235.2	263.7	245.4	227.2	223.7	216.9
77.5°	1982.8	1254.5	165.5	164.4	173.5	215.7	246.6	229.4	211.2	204.3	199.8
80°	1140.4	615.3	142.7	148.4	157.5	196.3	226.0	211.2	194.1	183.8	176.9
82.5°	436.1	214.6	125.6	129.0	139.3	175.8	205.5	192.9	175.8	184.9	155.2
85°	141.5	117.6	102.7	106.2	116.4	146.1	181.5	171.2	151.8	134.7	124.4
87.5°	62.8	63.9	54.8	60.5	73.1	97.0	132.4	125.6	110.7	92.5	89.0
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)