

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: P214719

Luminaire Tested: **ARCH-AF24-80-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-80-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 8107 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

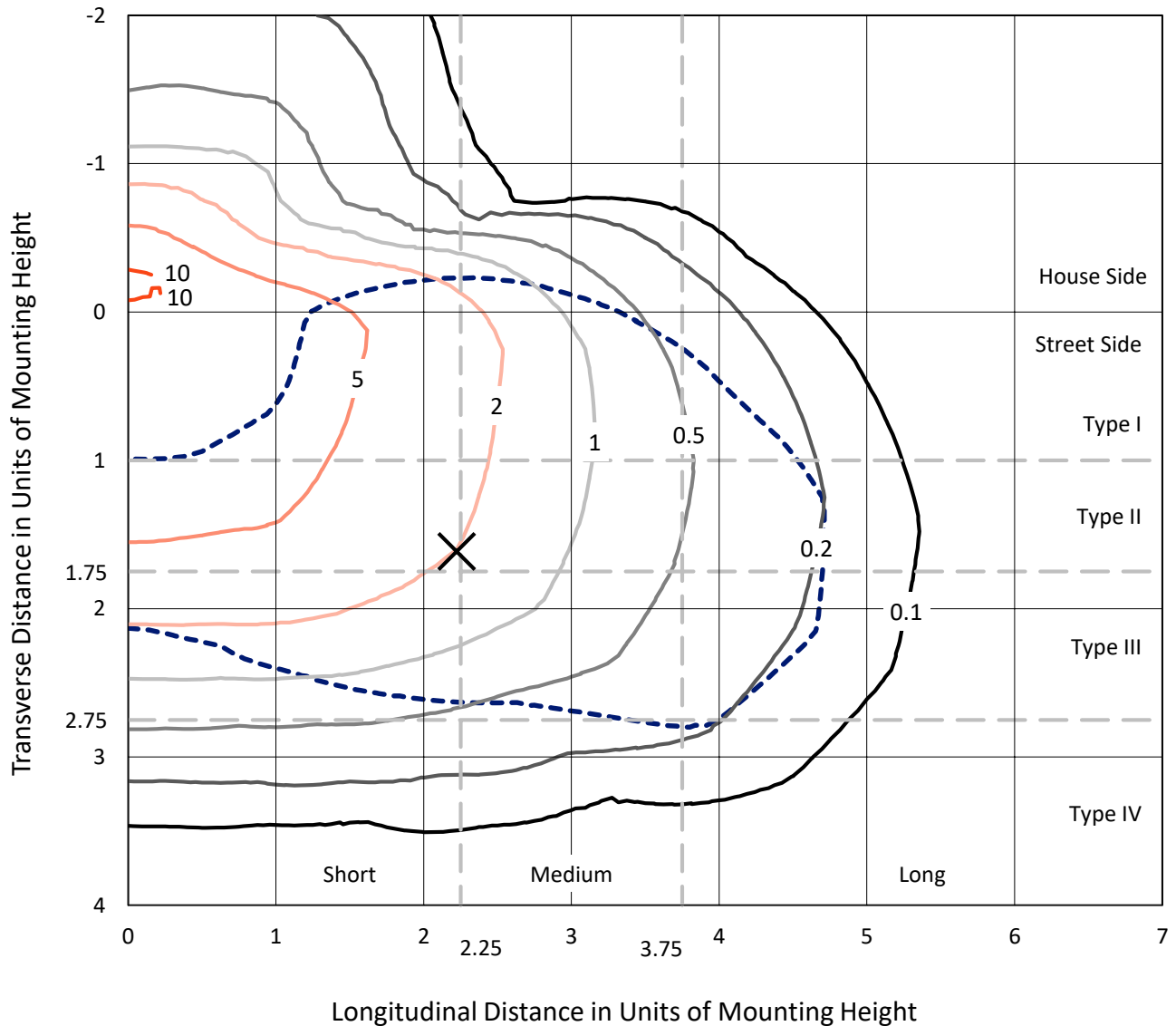
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

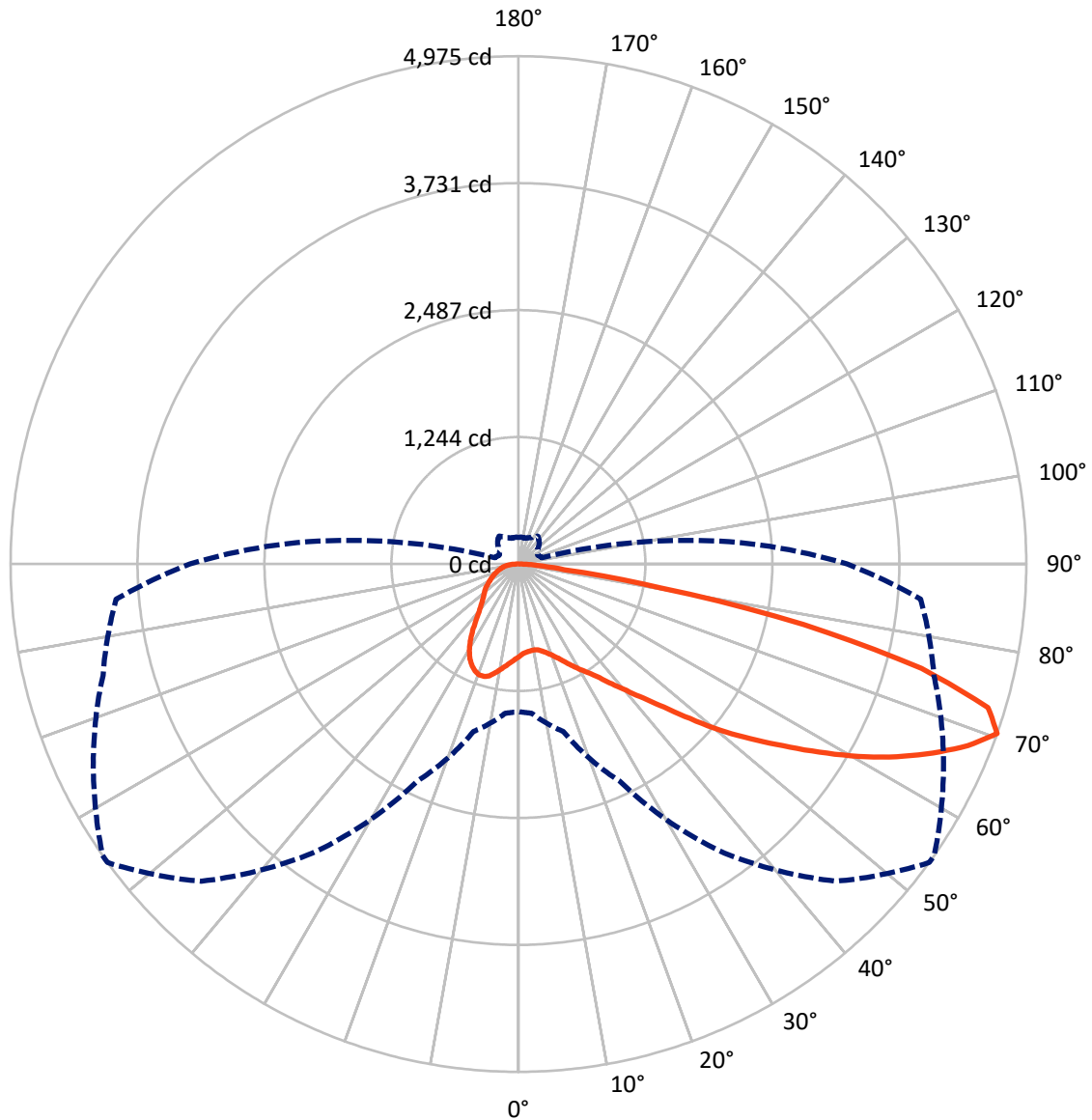


Based on 10 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1838.6	0.0	1838.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6268.4	0.0	6268.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	8107.0	0.0	8107.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.1
10°-20°	284.4	3.5
20°-30°	494.1	6.1
30°-40°	722.1	8.9
40°-50°	1133.3	14.0
50°-60°	1742.8	21.5
60°-70°	2129.3	26.3
70°-80°	1320.2	16.3
80°-90°	191.8	2.4
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°	8107.0	100.0
0°-180°	8107.0	100.0

Coefficient of Utilization



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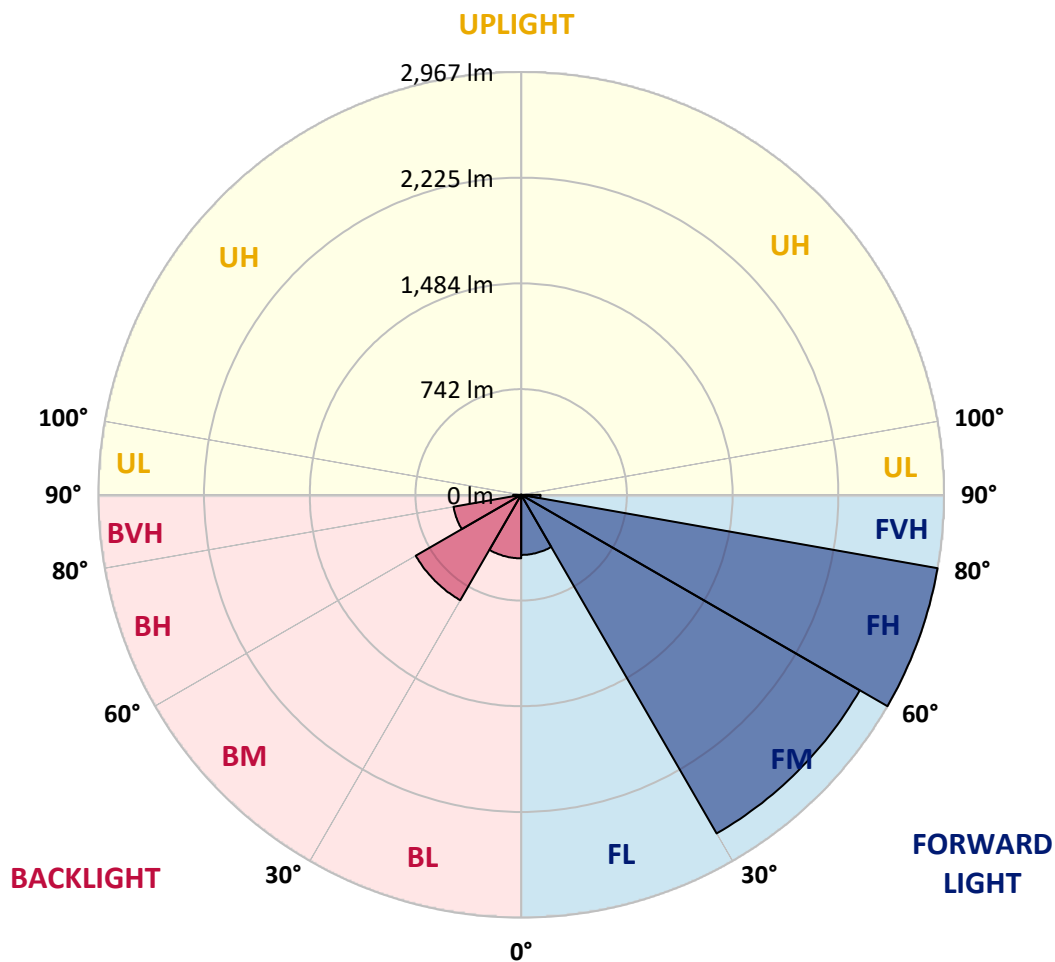
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	421.8	5.2			
FM	(30°-60°)	2743.8	33.8			
FH	(60°-80°)	2967.3	36.6			G2/5000
FVH	(80°-90°)	135.4	1.7			G2/225
BL	(0°-30°)	445.8	5.5	B1/500		
BM	(30°-60°)	854.4	10.5	B1/1000		
BH	(60°-80°)	482.1	5.9	B1/500		G1/500
BVH	(80°-90°)	56.4	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0
2.5°	871.4	868.4	868.4	872.9	874.4	878.8	878.8	880.3	884.7	892.2	901.1
5°	844.7	843.2	844.7	850.6	853.6	862.5	865.4	866.9	875.8	887.7	901.1
7.5°	817.9	816.5	819.4	828.3	837.2	850.6	858.0	859.5	872.9	889.2	907.0
10°	809.0	807.6	812.0	819.4	828.3	843.2	855.1	856.5	875.8	895.1	920.4
12.5°	820.9	819.4	823.9	831.3	840.2	850.6	864.0	865.4	890.7	915.9	942.6
15°	850.6	850.6	852.1	856.5	865.4	874.4	886.2	887.7	914.4	944.1	970.8
17.5°	896.6	893.6	893.6	892.2	898.1	902.6	917.4	918.9	947.1	973.8	1000.5
20°	953.0	951.5	945.6	938.2	936.7	939.7	954.5	956.0	984.2	1006.5	1031.7
22.5°	1021.3	1022.8	1009.4	993.1	985.7	990.1	1003.5	1005.0	1025.8	1045.1	1067.3
25°	1111.9	1107.4	1088.1	1064.4	1049.5	1049.5	1062.9	1062.9	1082.2	1094.1	1108.9
27.5°	1198.0	1189.1	1171.2	1137.1	1113.4	1117.8	1131.2	1131.2	1149.0	1153.4	1160.9
30°	1291.5	1282.6	1260.3	1217.3	1186.1	1183.1	1199.4	1198.0	1221.7	1220.2	1214.3
32.5°	1405.8	1401.3	1364.2	1309.3	1267.7	1257.3	1272.2	1273.7	1288.5	1284.1	1264.8
35°	1566.1	1564.6	1530.5	1434.0	1379.1	1359.8	1368.7	1368.7	1379.1	1367.2	1334.5
37.5°	1768.0	1771.0	1741.3	1598.8	1521.6	1488.9	1490.4	1488.9	1491.9	1478.5	1444.4
40°	1969.9	1977.3	1975.8	1803.6	1705.7	1649.2	1628.5	1625.5	1632.9	1627.0	1594.3
42.5°	2235.6	2253.4	2211.9	2056.0	1946.1	1851.1	1794.7	1787.3	1803.6	1811.1	1779.9
45°	2511.7	2505.8	2440.5	2327.6	2228.2	2106.5	1999.6	1987.7	1999.6	2021.8	1989.2
47.5°	2655.7	2651.3	2634.9	2578.5	2563.7	2424.1	2262.3	2251.9	2229.7	2260.8	2222.2
50°	2893.2	2897.7	2830.9	2824.9	2887.3	2810.1	2559.2	2535.5	2495.4	2520.6	2488.0
52.5°	3065.4	3046.1	3004.6	3056.5	3251.0	3209.4	2838.3	2827.9	2790.8	2784.9	2770.0
55°	3135.2	3135.2	3142.6	3262.9	3540.5	3485.5	3141.1	3151.5	3101.1	3059.5	3078.8
57.5°	3156.0	3164.9	3228.7	3427.6	3880.4	3700.8	3475.1	3490.0	3417.2	3334.1	3395.0
60°	3053.5	3080.3	3233.2	3521.2	4071.9	3929.4	3827.0	3831.4	3726.0	3604.3	3711.2
62.5°	2790.8	2823.5	3096.6	3559.8	4040.7	4163.9	4159.5	4169.9	4025.9	3874.5	4008.1
65°	2468.7	2501.3	2792.3	3451.4	4017.0	4331.7	4463.8	4492.0	4306.4	4103.1	4193.6
67.5°	1995.1	2038.2	2314.3	3086.2	3901.2	4469.7	4748.8	4778.5	4523.2	4221.8	4177.3
70°	1445.9	1466.7	1698.2	2345.5	3429.1	4394.0	4974.5	4973.0	4594.4	4212.9	3954.6
72.5°	696.2	712.5	912.9	1456.3	2452.3	3729.0	4811.2	4839.4	4496.5	4083.8	3445.4
75°	286.5	302.8	369.6	614.6	1287.0	2464.2	4077.8	4144.6	4083.8	3665.1	2695.8
77.5°	178.1	184.1	216.7	317.7	587.8	1150.5	2854.6	2945.2	3236.1	2936.3	1779.9
80°	133.6	138.1	161.8	222.7	371.1	424.6	1417.7	1532.0	1961.0	1684.9	806.1
82.5°	111.3	112.8	129.1	161.8	252.4	243.5	454.2	506.2	914.4	642.8	277.6
85°	103.9	106.9	115.8	115.8	160.3	152.9	188.5	197.4	265.7	219.7	96.5
87.5°	53.4	50.5	102.4	90.6	83.1	74.2	80.2	86.1	99.5	105.4	43.0
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°	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0	907.0
2.5°	904.0	908.5	915.9	923.3	932.2	942.6	948.6	956.0	961.9	959.0	957.5
5°	908.5	915.9	932.2	947.1	964.9	985.7	999.0	1013.9	1025.8	1028.7	1024.3
7.5°	915.9	929.3	951.5	978.3	1002.0	1028.7	1049.5	1070.3	1085.1	1088.1	1088.1
10°	933.7	948.6	978.3	1013.9	1042.1	1070.3	1094.1	1110.4	1123.7	1129.7	1129.7
12.5°	959.0	976.8	1012.4	1055.5	1086.6	1113.4	1126.7	1134.1	1140.1	1146.0	1147.5
15°	988.7	1008.0	1051.0	1097.0	1129.7	1143.0	1143.0	1141.6	1141.6	1144.5	1147.5
17.5°	1018.3	1039.1	1083.7	1132.6	1153.4	1146.0	1135.6	1131.2	1128.2	1126.7	1131.2
20°	1049.5	1070.3	1114.8	1160.9	1154.9	1123.7	1108.9	1098.5	1089.6	1085.1	1091.1
22.5°	1083.7	1103.0	1149.0	1180.2	1135.6	1088.1	1059.9	1043.6	1028.7	1019.8	1025.8
25°	1123.7	1143.0	1187.6	1186.1	1101.5	1034.7	990.1	963.4	947.1	938.2	938.2
27.5°	1171.2	1187.6	1230.6	1171.2	1054.0	963.4	898.1	872.9	868.4	861.0	861.0
30°	1220.2	1233.6	1270.7	1137.1	988.7	869.9	798.6	786.8	788.3	780.8	782.3
32.5°	1270.7	1284.1	1294.5	1086.6	904.0	764.5	717.0	708.1	706.6	700.7	694.7
35°	1342.0	1361.3	1297.4	1018.3	801.6	676.9	642.8	633.9	625.0	604.2	604.2
37.5°	1450.3	1471.1	1290.0	933.7	696.2	608.6	577.5	565.6	550.7	530.0	522.5
40°	1598.8	1598.8	1273.7	838.7	611.6	553.7	524.0	509.2	492.8	472.1	467.6
42.5°	1773.9	1732.4	1248.4	742.2	549.3	516.6	489.9	473.5	454.2	430.5	427.5
45°	1978.8	1866.0	1212.8	656.1	503.2	494.3	478.0	449.8	417.1	391.9	387.4
47.5°	2177.7	1986.2	1178.7	595.3	464.6	485.4	472.1	424.6	380.0	344.4	339.9
50°	2395.9	2093.1	1138.6	544.8	434.9	479.5	464.6	387.4	338.5	313.2	310.3
52.5°	2614.1	2201.5	1095.5	491.4	409.7	467.6	446.8	360.7	337.0	302.8	298.4
55°	2844.2	2327.6	1045.1	432.0	380.0	443.9	423.1	359.2	347.4	302.8	292.4
57.5°	3068.4	2467.2	963.4	374.1	347.4	408.2	414.2	350.3	325.1	299.9	288.0
60°	3316.3	2615.6	828.3	325.1	319.2	378.5	402.3	331.0	299.9	291.0	285.0
62.5°	3515.2	2749.2	647.2	291.0	295.4	354.8	387.4	319.2	289.5	282.0	280.6
65°	3601.3	2752.2	464.6	261.3	271.7	332.5	372.6	308.8	280.6	277.6	276.1
67.5°	3510.8	2600.8	326.6	233.1	246.4	311.7	353.3	298.4	271.7	273.1	270.2
70°	3218.3	2281.6	239.0	206.3	222.7	289.5	332.5	285.0	261.3	264.2	259.8
72.5°	2692.8	1778.4	191.5	184.1	203.4	265.7	311.7	270.2	244.9	246.4	237.5
75°	1989.2	1178.7	160.3	164.8	181.1	243.5	285.0	250.9	227.1	221.2	215.2
77.5°	1183.1	605.7	132.1	144.0	161.8	216.7	255.3	227.1	207.8	197.4	193.0
80°	488.4	244.9	108.4	121.7	141.0	193.0	225.6	198.9	185.6	175.2	169.2
82.5°	194.5	120.2	86.1	99.5	118.8	167.7	197.4	175.2	161.8	154.4	138.1
85°	74.2	59.4	57.9	69.8	89.1	129.1	163.3	147.0	136.6	117.3	112.8
87.5°	29.7	26.7	26.7	34.1	50.5	81.6	117.3	102.4	106.9	84.6	86.1
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)