

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: P265972

Luminaire Tested: **ARCH-AF24-80-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265972
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-T3-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7956.9 lumens
Efficiency: N/A
Efficacy: 95.9 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

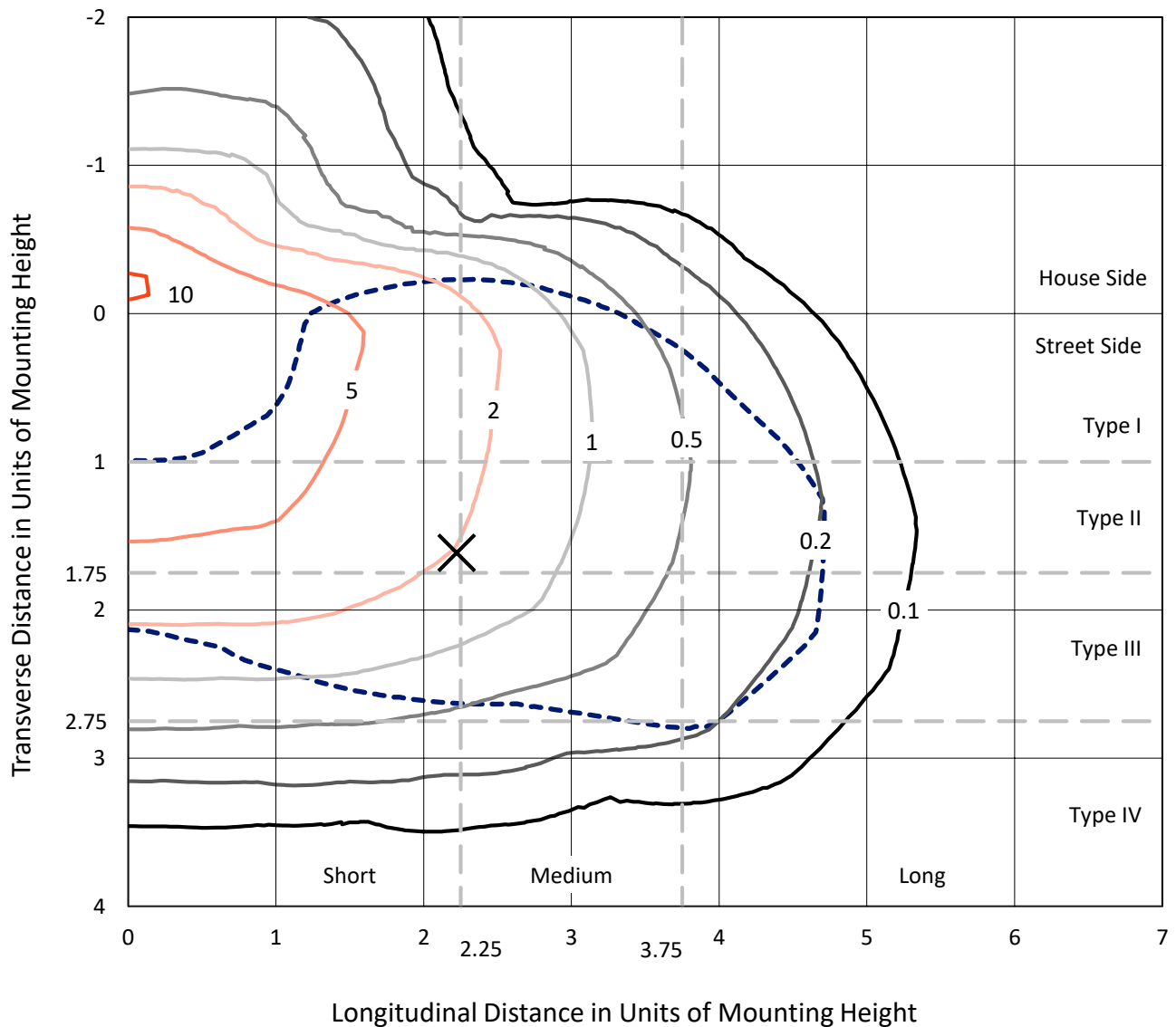
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

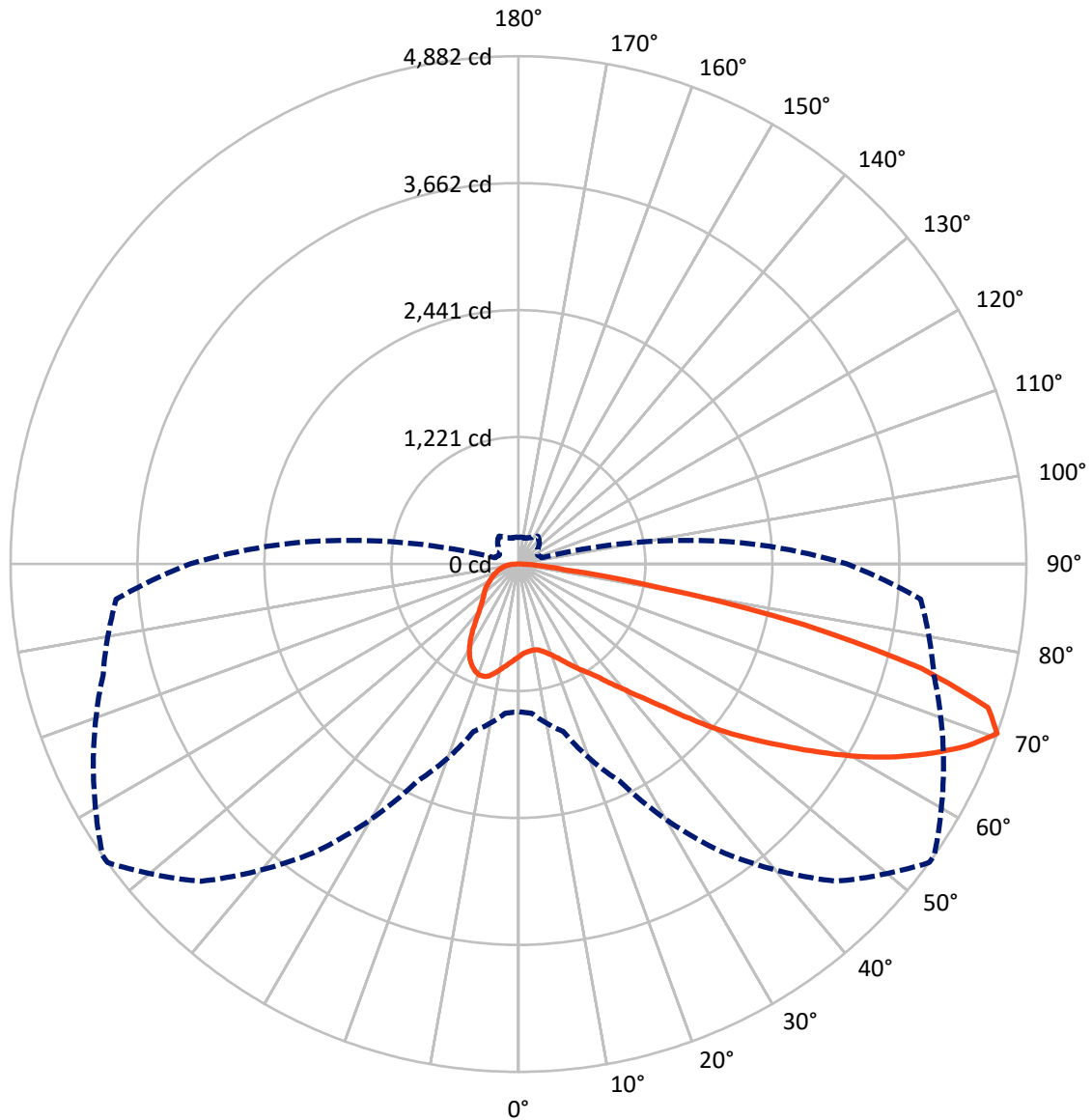


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type III - Short - Non-Cutoff

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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	1804.6	0.0	1804.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6152.3	0.0	6152.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	7956.9	0.0	7956.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	1.1
10°-20°	279.1	3.5
20°-30°	485.0	6.1
30°-40°	708.7	8.9
40°-50°	1112.3	14.0
50°-60°	1710.5	21.5
60°-70°	2089.8	26.3
70°-80°	1295.7	16.3
80°-90°	188.2	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°	7956.9	100.0
0°-180°	7956.9	100.0

Coefficient of Utilization



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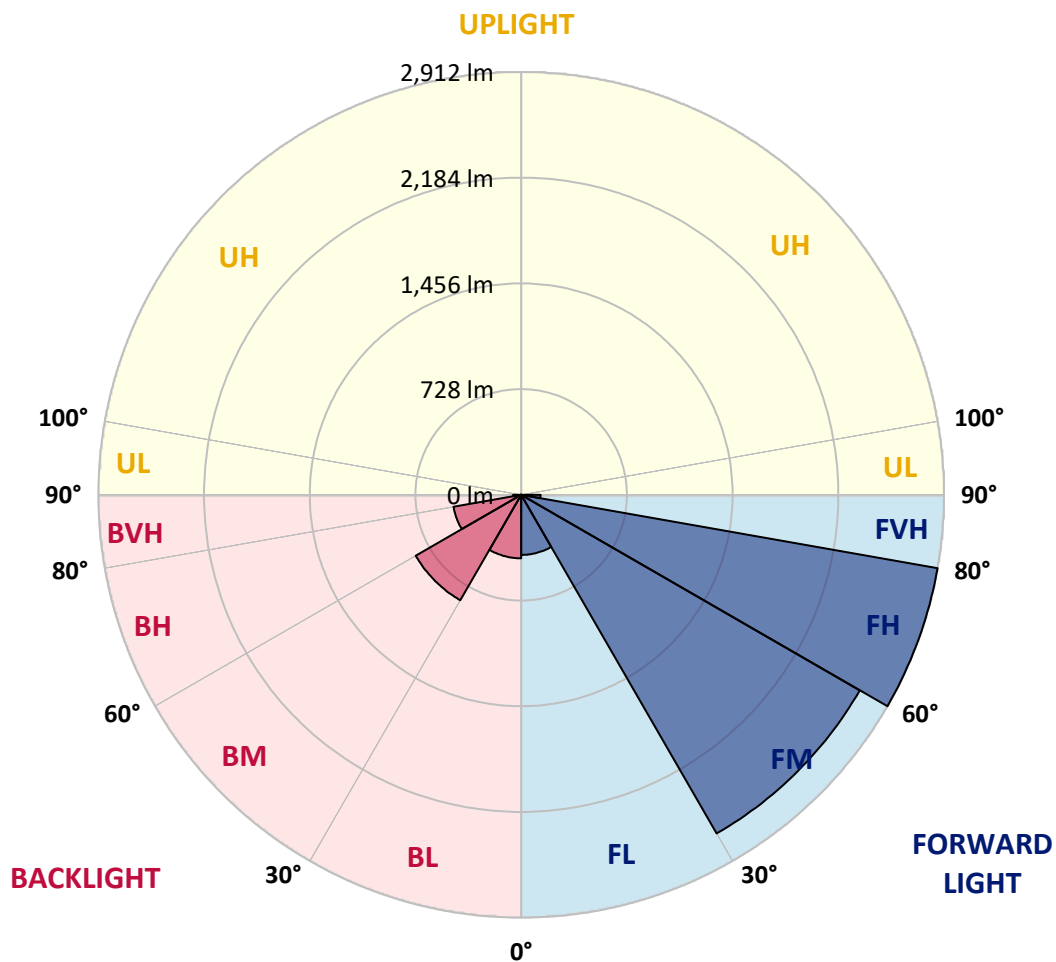
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	414.0	5.2			
FM	(30°-60°)	2693.0	33.8			
FH	(60°-80°)	2912.3	36.6			G2/5000
FVH	(80°-90°)	132.9	1.7			G2/225
BL	(0°-30°)	437.5	5.5	B1/500		
BM	(30°-60°)	838.6	10.5	B1/1000		
BH	(60°-80°)	473.2	5.9	B1/500		G1/500
BVH	(80°-90°)	55.3	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°	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2
2.5°	855.2	852.3	852.3	856.8	858.2	862.6	862.6	864.0	868.3	875.7	884.4
5°	829.0	827.6	829.0	834.9	837.8	846.6	849.3	850.9	859.6	871.3	884.4
7.5°	802.7	801.4	804.3	813.0	821.7	834.9	842.2	843.6	856.8	872.8	890.2
10°	794.0	792.7	796.9	804.3	813.0	827.6	839.2	840.6	859.6	878.5	903.3
12.5°	805.7	804.3	808.7	815.9	824.6	834.9	848.0	849.3	874.2	898.9	925.2
15°	834.9	834.9	836.3	840.6	849.3	858.2	869.7	871.3	897.4	926.6	952.8
17.5°	880.0	877.0	877.0	875.7	881.4	885.9	900.5	901.9	929.6	955.7	981.9
20°	935.3	933.9	928.0	920.9	919.3	922.3	936.8	938.3	965.9	987.9	1012.6
22.5°	1002.4	1003.9	990.7	974.8	967.5	971.7	984.9	986.3	1006.8	1025.8	1047.6
25°	1091.4	1086.9	1067.9	1044.6	1030.0	1030.0	1043.2	1043.2	1062.2	1073.8	1088.3
27.5°	1175.8	1167.1	1149.6	1116.1	1092.8	1097.1	1110.2	1110.2	1127.7	1132.0	1139.4
30°	1267.6	1258.9	1237.0	1194.7	1164.2	1161.1	1177.1	1175.8	1199.1	1197.6	1191.8
32.5°	1379.7	1375.3	1339.0	1285.0	1244.2	1234.0	1248.6	1250.1	1264.6	1260.3	1241.4
35°	1537.1	1535.7	1502.1	1407.5	1353.6	1334.6	1343.3	1343.3	1353.6	1341.9	1309.8
37.5°	1735.3	1738.2	1709.0	1569.2	1493.4	1461.4	1462.8	1461.4	1464.2	1451.1	1417.6
40°	1933.4	1940.7	1939.3	1770.2	1674.1	1618.7	1598.4	1595.4	1602.7	1596.8	1564.8
42.5°	2194.2	2211.6	2170.9	2018.0	1910.1	1816.8	1761.4	1754.2	1770.2	1777.6	1746.9
45°	2465.2	2459.4	2395.3	2284.5	2187.0	2067.4	1962.5	1950.8	1962.5	1984.4	1952.3
47.5°	2606.5	2602.2	2586.1	2530.7	2516.2	2379.3	2220.4	2210.2	2188.5	2219.0	2181.1
50°	2839.6	2844.0	2778.5	2772.6	2833.9	2758.1	2511.8	2488.6	2449.1	2473.9	2442.0
52.5°	3008.7	2989.6	2949.0	2999.9	3190.8	3149.9	2785.7	2775.6	2739.1	2733.4	2718.7
55°	3077.1	3077.1	3084.4	3202.5	3475.0	3420.9	3083.0	3093.1	3043.6	3002.9	3021.8
57.5°	3097.5	3106.2	3169.0	3364.2	3808.5	3632.2	3410.8	3425.3	3353.9	3272.3	3332.2
60°	2996.9	3023.2	3173.4	3456.0	3996.5	3856.7	3756.2	3760.5	3657.0	3537.5	3642.4
62.5°	2739.1	2771.2	3039.2	3493.9	3965.8	4086.7	4082.4	4092.7	3951.4	3802.7	3933.9
65°	2423.0	2455.0	2740.5	3387.5	3942.7	4251.5	4381.2	4408.8	4226.6	4027.1	4115.9
67.5°	1958.1	2000.4	2271.5	3029.1	3828.9	4387.0	4660.9	4690.1	4439.5	4143.6	4100.0
70°	1419.1	1439.5	1666.7	2302.0	3365.6	4312.7	4882.4	4880.9	4509.3	4134.9	3881.3
72.5°	683.3	699.3	896.0	1429.4	2406.9	3660.0	4722.1	4749.8	4413.3	4008.1	3381.6
75°	281.2	297.2	362.7	603.2	1263.1	2418.5	4002.3	4067.9	4008.1	3597.3	2645.9
77.5°	174.8	180.6	212.7	311.8	576.9	1129.2	2801.8	2890.7	3176.1	2881.9	1746.9
80°	131.2	135.6	158.8	218.6	364.3	416.8	1391.5	1503.7	1924.7	1653.7	791.1
82.5°	109.2	110.8	126.8	158.8	247.8	238.9	445.7	496.9	897.4	630.9	272.5
85°	102.0	104.9	113.6	113.6	157.4	150.0	185.1	193.8	260.8	215.7	94.7
87.5°	52.5	49.5	100.5	88.9	81.6	72.9	78.7	84.5	97.6	103.5	42.2
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°	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2	890.2
2.5°	887.3	891.7	898.9	906.2	915.0	925.2	931.1	938.3	944.1	941.2	939.7
5°	891.7	898.9	915.0	929.6	947.1	967.5	980.5	995.1	1006.8	1009.7	1005.4
7.5°	898.9	912.0	933.9	960.2	983.5	1009.7	1030.0	1050.5	1065.0	1067.9	1067.9
10°	916.5	931.1	960.2	995.1	1022.8	1050.5	1073.8	1089.9	1102.8	1108.8	1108.8
12.5°	941.2	958.8	993.6	1035.9	1066.5	1092.8	1105.9	1113.1	1119.0	1124.8	1126.3
15°	970.3	989.4	1031.6	1076.7	1108.8	1121.9	1121.9	1120.5	1120.5	1123.3	1126.3
17.5°	999.5	1019.8	1063.7	1111.7	1132.0	1124.8	1114.5	1110.2	1107.3	1105.9	1110.2
20°	1030.0	1050.5	1094.1	1139.4	1133.5	1102.8	1088.3	1078.1	1069.4	1065.0	1070.9
22.5°	1063.7	1082.5	1127.7	1158.4	1114.5	1067.9	1040.2	1024.2	1009.7	1000.9	1006.8
25°	1102.8	1121.9	1165.6	1164.2	1081.1	1015.5	971.7	945.6	929.6	920.9	920.9
27.5°	1149.6	1165.6	1207.9	1149.6	1034.5	945.6	881.4	856.8	852.3	845.0	845.0
30°	1197.6	1210.7	1247.1	1116.1	970.3	853.7	783.9	772.3	773.7	766.3	767.8
32.5°	1247.1	1260.3	1270.6	1066.5	887.3	750.4	703.7	695.0	693.5	687.7	681.9
35°	1317.2	1336.0	1273.3	999.5	786.7	664.3	630.9	622.2	613.5	593.1	593.1
37.5°	1423.5	1443.8	1266.2	916.5	683.3	597.4	566.8	555.2	540.5	520.2	512.8
40°	1569.2	1569.2	1250.1	823.1	600.2	543.5	514.3	499.7	483.6	463.3	458.9
42.5°	1741.1	1700.3	1225.3	728.4	539.2	507.1	480.9	464.8	445.7	422.6	419.6
45°	1942.1	1831.5	1190.3	643.9	493.9	485.2	469.2	441.4	409.4	384.7	380.3
47.5°	2137.3	1949.4	1156.8	584.3	456.0	476.5	463.3	416.8	372.9	338.0	333.6
50°	2351.6	2054.3	1117.5	534.8	426.9	470.6	456.0	380.3	332.3	307.4	304.5
52.5°	2565.6	2160.8	1075.2	482.3	402.1	458.9	438.6	354.0	330.8	297.2	292.8
55°	2791.6	2284.5	1025.8	424.0	372.9	435.7	415.2	352.6	340.9	297.2	287.0
57.5°	3011.6	2421.6	945.6	367.1	340.9	400.6	406.6	343.8	319.1	294.4	282.6
60°	3254.9	2567.1	813.0	319.1	313.2	371.4	394.9	324.8	294.4	285.7	279.7
62.5°	3450.1	2698.2	635.2	285.7	290.0	348.3	380.3	313.2	284.1	276.8	275.4
65°	3534.7	2701.3	456.0	256.5	266.6	326.4	365.7	303.1	275.4	272.5	271.0
67.5°	3445.8	2552.7	320.5	228.8	241.9	306.0	346.7	292.8	266.6	268.1	265.2
70°	3158.7	2239.4	234.5	202.5	218.6	284.1	326.4	279.7	256.5	259.3	254.9
72.5°	2643.0	1745.4	187.9	180.6	199.7	260.8	306.0	265.2	240.3	241.9	233.1
75°	1952.3	1156.8	157.4	161.8	177.8	238.9	279.7	246.2	222.9	217.1	211.2
77.5°	1161.1	594.5	129.6	141.4	158.8	212.7	250.5	222.9	203.9	193.8	189.5
80°	479.3	240.3	106.4	119.5	138.3	189.5	221.4	195.2	182.1	171.9	166.0
82.5°	190.9	117.9	84.5	97.6	116.6	164.6	193.8	171.9	158.8	151.5	135.6
85°	72.9	58.3	56.9	68.5	87.5	126.8	160.3	144.3	134.0	115.2	110.8
87.5°	29.1	26.2	26.2	33.4	49.5	80.0	115.2	100.5	104.9	83.1	84.5
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)