

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: P397597

Luminaire Tested: **ARCH-S-PA1-100-830-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397597
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-830-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9305 lumens
Efficiency: N/A
Efficacy: 96.9 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 - G3

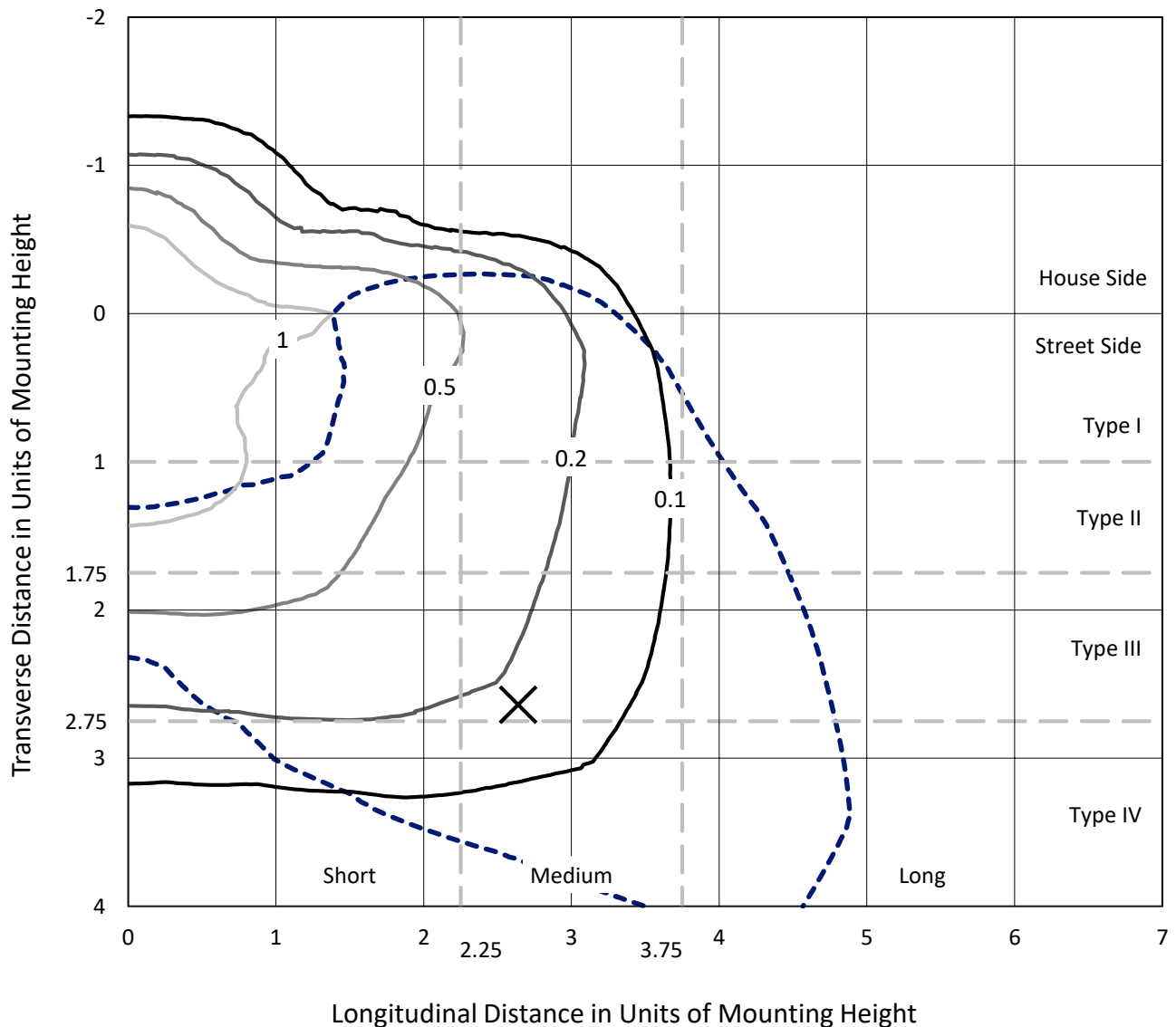
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

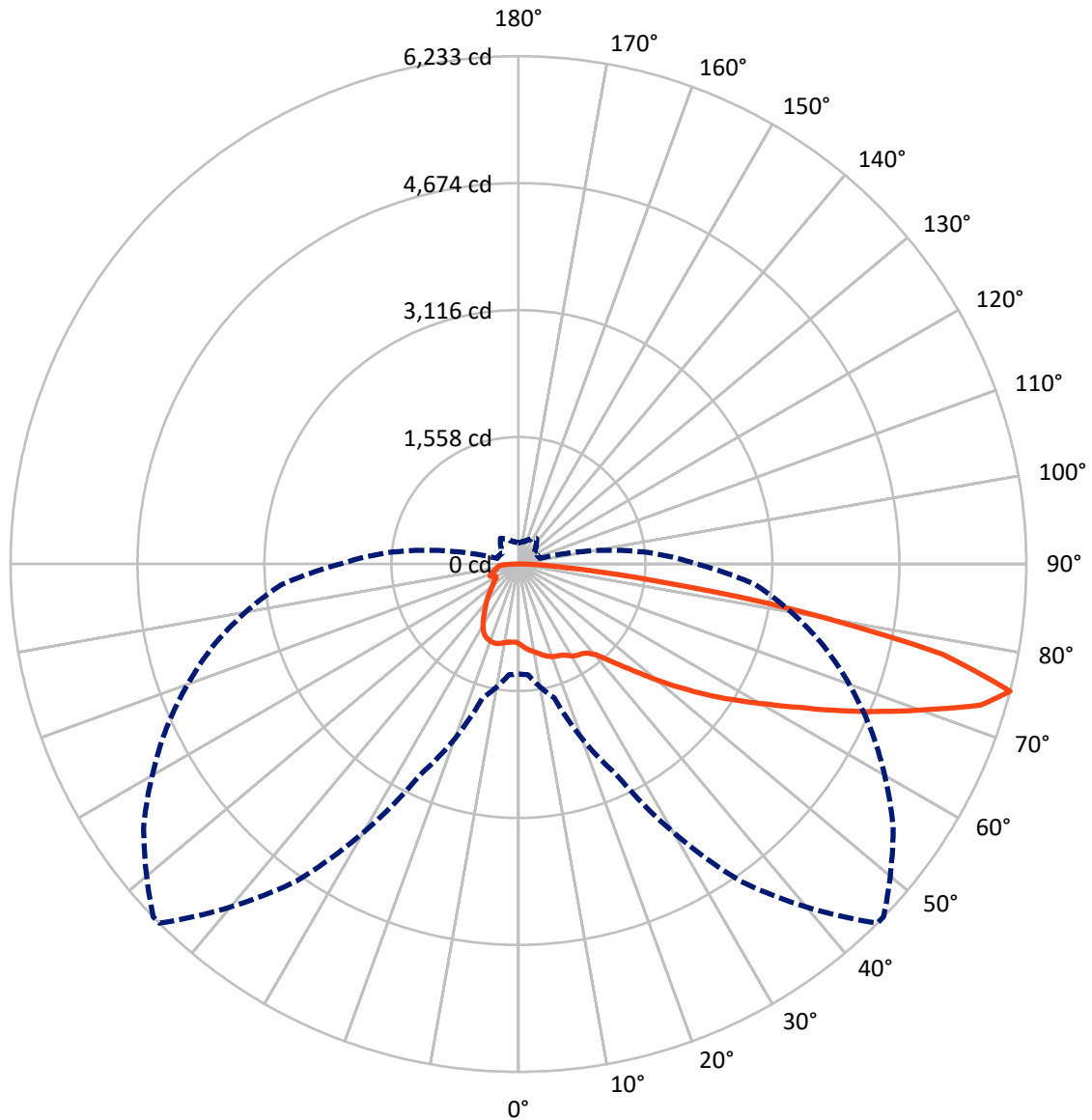
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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	2056.4	0.0	2056.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	7248.6	0.0	7248.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	9305.0	0.0	9305.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.0
10°-20°	307.6	3.3
20°-30°	524.3	5.6
30°-40°	734.7	7.9
40°-50°	1079.3	11.6
50°-60°	1717.8	18.5
60°-70°	2443.6	26.3
70°-80°	2046.0	22.0
80°-90°	355.1	3.8
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°	9305.0	100.0
0°-180°	9305.0	100.0

Coefficient of Utilization



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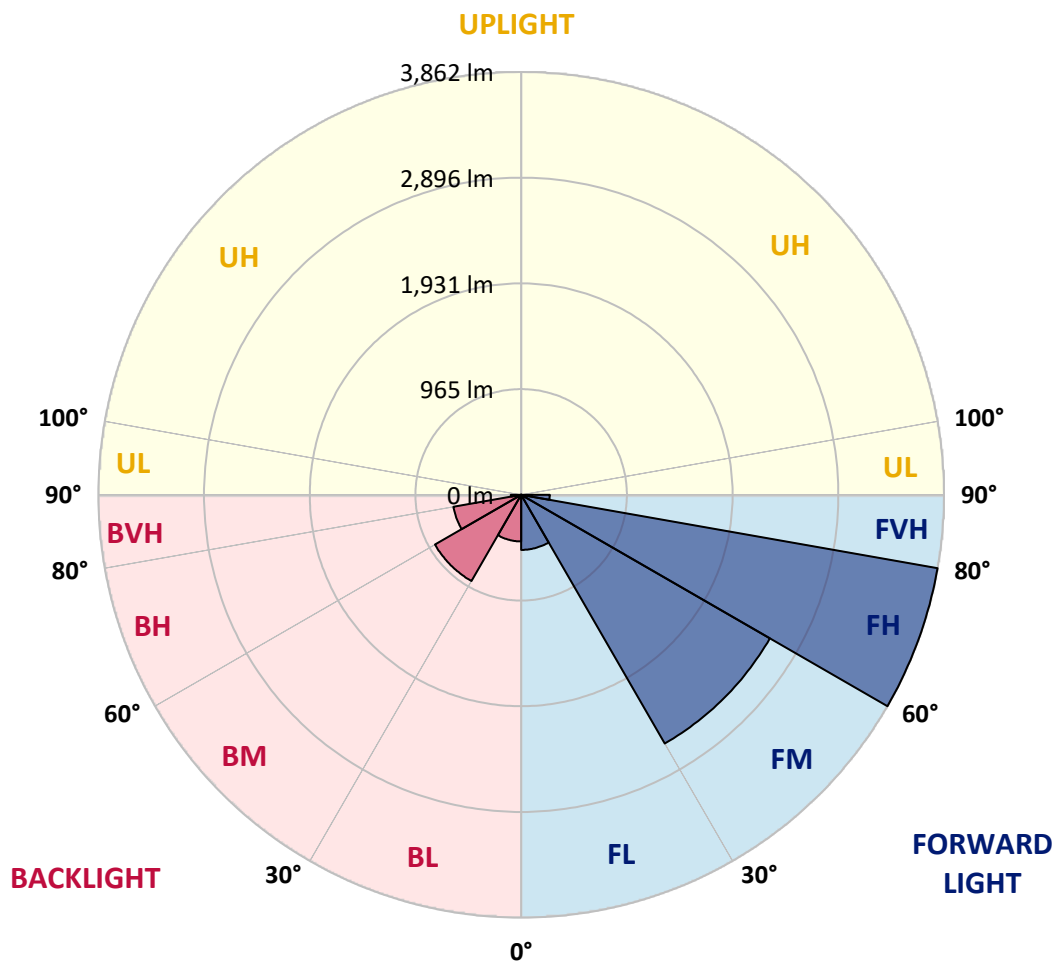
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	503.0	5.4			
FM (30°-60°)	2622.8	28.2			
FH (60°-80°)	3861.8	41.5			G2/5000
FVH (80°-90°)	261.0	2.8			G3/500
BL (0°-30°)	425.6	4.6	B1/500		
BM (30°-60°)	909.0	9.8	B1/1000		
BH (60°-80°)	627.7	6.7	B2/1000		G2/1000
BVH (80°-90°)	94.0	1.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2
2.5°	1033.2	1028.2	1025.7	1025.7	1015.8	1009.6	1008.3	999.6	992.1	984.7	978.5
5°	1092.9	1089.1	1081.7	1075.4	1061.8	1044.4	1041.9	1023.2	1004.6	987.2	972.3
7.5°	1147.6	1140.1	1131.4	1119.0	1096.6	1073.0	1069.2	1043.1	1017.0	990.9	971.0
10°	1193.6	1186.1	1173.7	1156.3	1127.7	1099.1	1095.3	1068.0	1040.6	1009.6	981.0
12.5°	1237.1	1230.9	1212.2	1188.6	1155.0	1128.9	1125.2	1101.6	1073.0	1038.1	1000.9
15°	1274.4	1268.2	1248.3	1220.9	1182.4	1162.5	1157.5	1135.1	1106.5	1069.2	1030.7
17.5°	1293.0	1293.0	1271.9	1242.1	1206.0	1191.1	1187.3	1160.0	1133.9	1097.8	1059.3
20°	1299.2	1301.7	1286.8	1250.8	1219.7	1213.5	1209.7	1187.3	1157.5	1122.7	1086.6
22.5°	1303.0	1307.9	1295.5	1254.5	1228.4	1224.6	1222.2	1207.2	1183.6	1150.0	1114.0
25°	1315.4	1315.4	1306.7	1260.7	1239.6	1238.3	1238.3	1229.6	1213.5	1184.9	1148.8
27.5°	1334.1	1332.8	1321.6	1274.4	1264.4	1268.2	1266.9	1265.7	1254.5	1225.9	1187.3
30°	1365.1	1365.1	1352.7	1301.7	1295.5	1311.7	1312.9	1315.4	1298.0	1253.2	1222.2
32.5°	1412.4	1407.4	1395.0	1329.1	1319.1	1334.1	1336.5	1335.3	1320.4	1278.1	1263.2
35°	1557.8	1546.7	1501.9	1390.0	1340.3	1349.0	1350.2	1356.4	1358.9	1325.4	1317.9
37.5°	1812.7	1797.8	1729.4	1534.2	1407.4	1386.3	1385.0	1401.2	1414.9	1385.0	1385.0
40°	2090.0	2077.5	2037.8	1782.9	1531.7	1462.1	1457.1	1472.1	1489.5	1468.3	1474.5
42.5°	2328.7	2338.6	2342.4	2046.5	1718.2	1603.8	1590.2	1569.0	1596.4	1577.7	1602.6
45°	2507.7	2502.7	2571.1	2316.3	1959.4	1781.6	1763.0	1705.8	1740.6	1739.4	1794.1
47.5°	2697.9	2689.2	2717.8	2569.9	2234.2	1999.2	1970.6	1886.1	1938.3	1974.3	2065.1
50°	2878.2	2880.7	2890.7	2770.1	2532.6	2264.0	2228.0	2114.8	2189.4	2265.3	2393.3
52.5°	3113.2	3095.8	3083.4	3003.8	2867.0	2540.0	2516.4	2387.1	2491.6	2581.1	2751.4
55°	3318.4	3307.2	3299.7	3296.0	3146.8	2844.7	2819.8	2685.5	2836.0	2899.4	3150.5
57.5°	3537.2	3531.0	3570.7	3634.1	3574.5	3154.2	3128.1	2998.8	3166.7	3211.4	3583.2
60°	3697.6	3701.3	3810.7	3972.3	3931.3	3489.9	3458.8	3344.5	3488.7	3528.5	4015.8
62.5°	3698.8	3736.1	3989.7	4279.4	4326.7	3876.6	3840.5	3716.2	3819.4	3819.4	4403.7
65°	3345.7	3388.0	3957.4	4355.3	4727.0	4336.6	4301.8	4106.6	4145.1	4092.9	4768.0
67.5°	2993.9	3043.6	3579.4	4361.5	5008.0	4829.0	4787.9	4497.0	4431.1	4299.3	5022.9
70°	2760.1	2794.9	3242.5	4280.7	5177.1	5343.7	5312.6	4867.5	4656.1	4472.1	4969.4
72.5°	2323.7	2311.3	2739.0	3896.5	5271.6	5928.0	5901.9	5270.3	4851.3	4390.1	4238.4
75°	1349.0	1363.9	1699.6	2854.6	4751.9	6232.6	6230.1	5614.7	4765.5	3877.8	2920.5
77.5°	389.2	400.3	558.2	1254.5	3005.0	5316.3	5486.7	5134.8	4028.3	2763.8	1514.3
80°	170.3	179.0	242.4	417.7	1294.3	3472.5	3621.7	3472.5	2429.4	1268.2	594.3
82.5°	100.7	106.9	157.9	258.6	620.4	1652.3	1853.8	1618.8	1048.1	538.3	246.2
85°	57.2	59.7	90.8	164.1	390.4	578.1	649.0	608.0	511.0	305.9	129.3
87.5°	26.1	27.4	44.8	77.1	218.8	195.2	202.7	268.6	295.9	186.5	64.7
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°	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2	977.2
2.5°	976.0	972.3	964.8	962.3	958.6	959.8	961.1	961.1	962.3	958.6	958.6
5°	966.0	959.8	952.4	952.4	952.4	962.3	971.0	976.0	978.5	978.5	976.0
7.5°	962.3	954.8	946.1	948.6	951.1	963.6	979.7	995.9	1000.9	1000.9	998.4
10°	969.8	962.3	956.1	959.8	966.0	976.0	988.4	1003.3	1015.8	1017.0	1015.8
12.5°	987.2	978.5	972.3	979.7	987.2	993.4	999.6	1005.8	1022.0	1024.5	1024.5
15°	1015.8	1007.1	999.6	1005.8	1008.3	1008.3	1008.3	1008.3	1024.5	1027.0	1027.0
17.5°	1044.4	1036.9	1029.4	1030.7	1023.2	1013.3	1009.6	1008.3	1017.0	1024.5	1025.7
20°	1071.7	1065.5	1058.0	1045.6	1027.0	1008.3	1002.1	1002.1	1007.1	1018.3	1018.3
22.5°	1101.6	1094.1	1081.7	1053.1	1022.0	995.9	989.7	993.4	999.6	1014.5	1013.3
25°	1135.1	1125.2	1104.0	1050.6	1005.8	974.7	976.0	987.2	998.4	1014.5	1014.5
27.5°	1172.4	1158.7	1116.5	1030.7	969.8	939.9	951.1	977.2	993.4	1010.8	1013.3
30°	1213.5	1201.0	1126.4	995.9	911.3	884.0	911.3	953.6	978.5	994.6	998.4
32.5°	1263.2	1253.2	1135.1	951.1	835.5	811.9	851.7	903.9	943.7	962.3	966.0
35°	1325.4	1315.4	1146.3	900.1	764.6	739.8	775.8	829.3	881.5	905.1	912.6
37.5°	1406.2	1391.2	1156.3	845.4	704.9	676.4	693.8	742.2	789.5	821.8	830.5
40°	1509.4	1485.7	1165.0	783.3	652.7	620.4	626.6	650.2	677.6	706.2	717.4
42.5°	1654.8	1607.6	1166.2	717.4	599.3	569.4	566.9	574.4	574.4	574.4	578.1
45°	1857.5	1768.0	1168.7	655.2	544.6	513.5	506.0	503.5	484.9	448.8	446.3
47.5°	2113.6	1978.1	1179.9	603.0	487.4	460.0	450.1	440.1	405.3	368.0	360.6
50°	2441.8	2221.8	1202.3	553.3	438.9	420.2	407.8	384.2	345.6	317.0	309.6
52.5°	2819.8	2511.5	1223.4	501.0	402.8	390.4	375.5	346.9	305.9	288.4	286.0
55°	3253.7	2834.7	1265.7	455.0	371.7	363.0	349.4	322.0	290.9	278.5	277.3
57.5°	3697.6	3196.5	1325.4	414.0	341.9	336.9	336.9	313.3	293.4	288.4	288.4
60°	4125.2	3507.3	1279.3	375.5	314.6	317.0	340.7	334.4	319.5	325.7	329.5
62.5°	4457.2	3690.1	1038.1	344.4	294.7	317.0	378.0	378.0	360.6	358.1	358.1
65°	4598.9	3687.6	729.8	320.8	287.2	348.1	421.5	401.6	355.6	338.2	334.4
67.5°	4562.9	3526.0	503.5	304.6	284.7	380.4	441.4	385.4	333.2	318.3	307.1
70°	4245.8	3184.1	387.9	289.7	281.0	366.8	435.2	366.8	315.8	302.1	292.2
72.5°	3425.3	2553.7	322.0	274.8	266.1	339.4	414.0	349.4	302.1	287.2	277.3
75°	2184.5	1606.3	272.3	254.9	237.5	304.6	385.4	332.0	287.2	267.3	259.8
77.5°	1050.6	692.5	237.5	231.3	213.8	282.2	356.8	309.6	267.3	251.1	246.2
80°	425.2	317.0	206.4	207.6	196.4	268.6	336.9	288.4	247.4	230.0	221.3
82.5°	221.3	184.0	174.1	179.0	179.0	256.1	322.0	271.0	230.0	222.5	194.0
85°	119.4	114.4	134.3	144.2	155.4	231.3	299.6	252.4	210.1	180.3	174.1
87.5°	58.4	74.6	75.8	87.0	108.2	185.3	252.4	211.4	175.3	145.5	143.0
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)