

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: P572650

Luminaire Tested: **ARCH-S-PA2-100-727-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572650
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-100-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8525.9 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

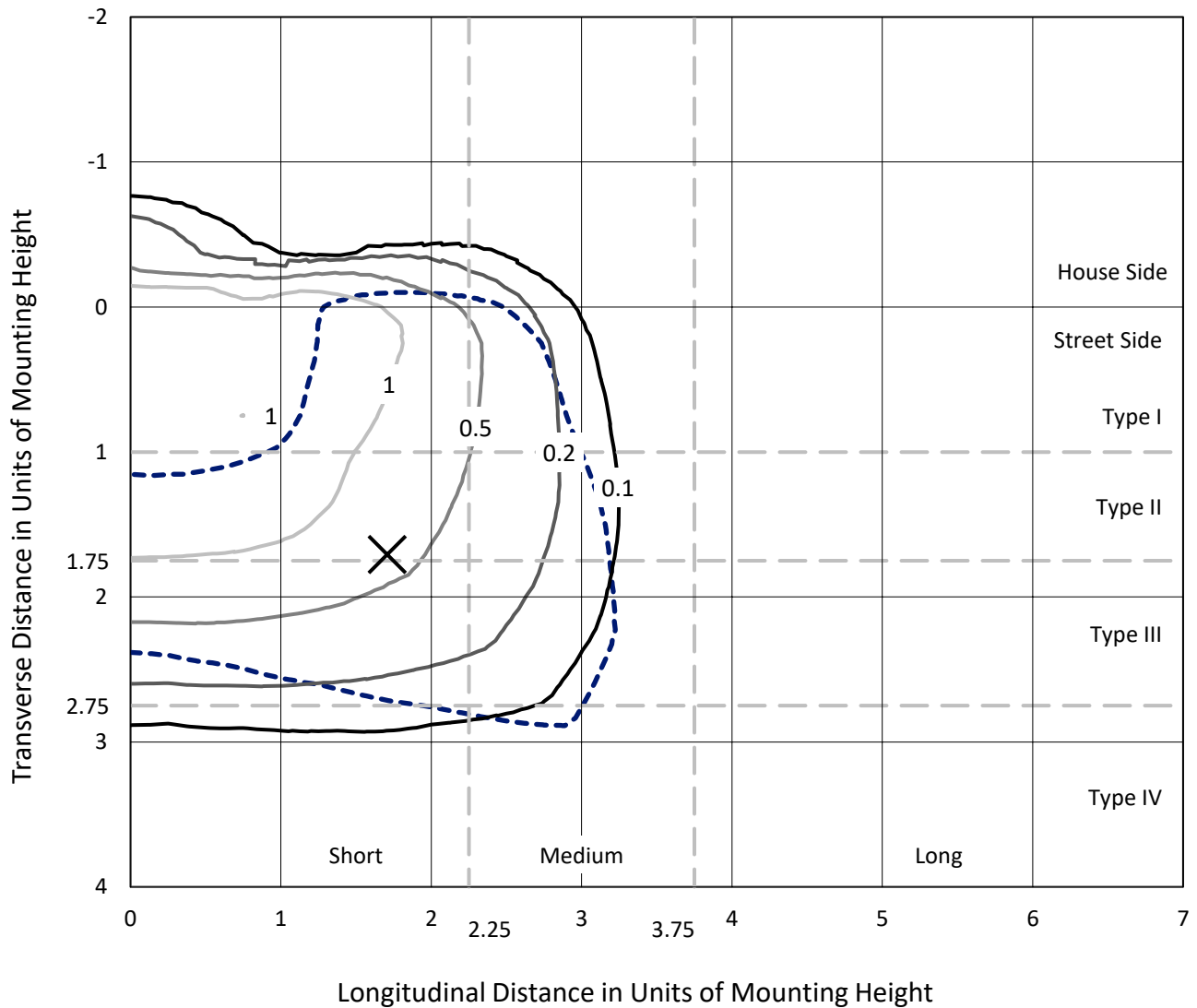
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

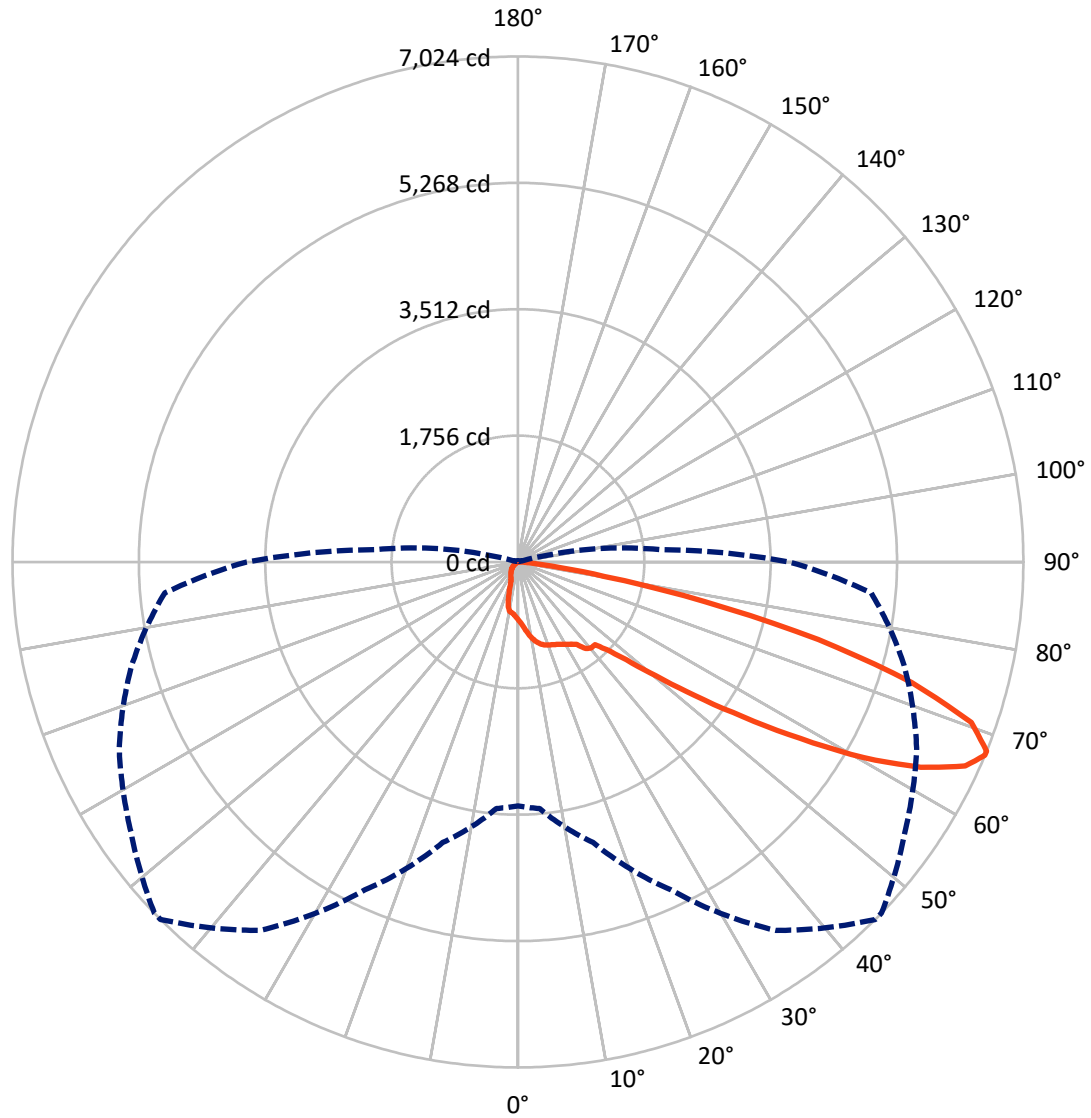
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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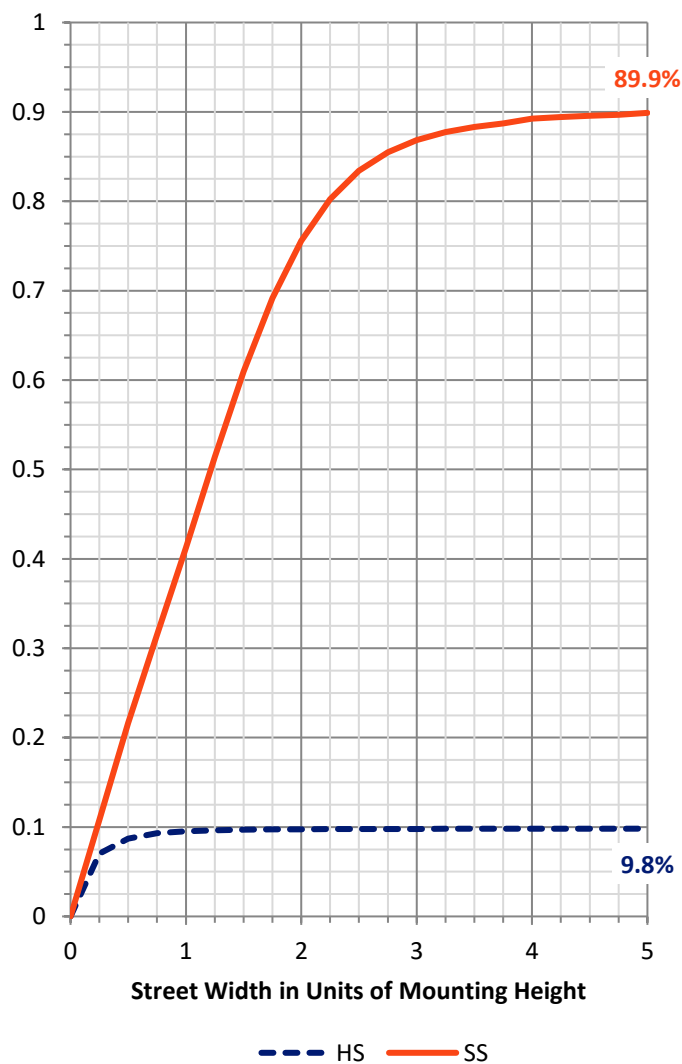
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	844.7	0.0	844.7
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	7681.2	0.0	7681.2
	% Fixture	90.1	0.0	90.1
Total	Lumens	8525.9	0.0	8525.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	0.9
10°-20°	244.7	2.9
20°-30°	391.4	4.6
30°-40°	563.2	6.6
40°-50°	988.1	11.6
50°-60°	2082.0	24.4
60°-70°	2879.1	33.8
70°-80°	1205.3	14.1
80°-90°	91.1	1.1
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°	8525.9	100.0
0°-180°	8525.9	100.0

Coefficient of Utilization



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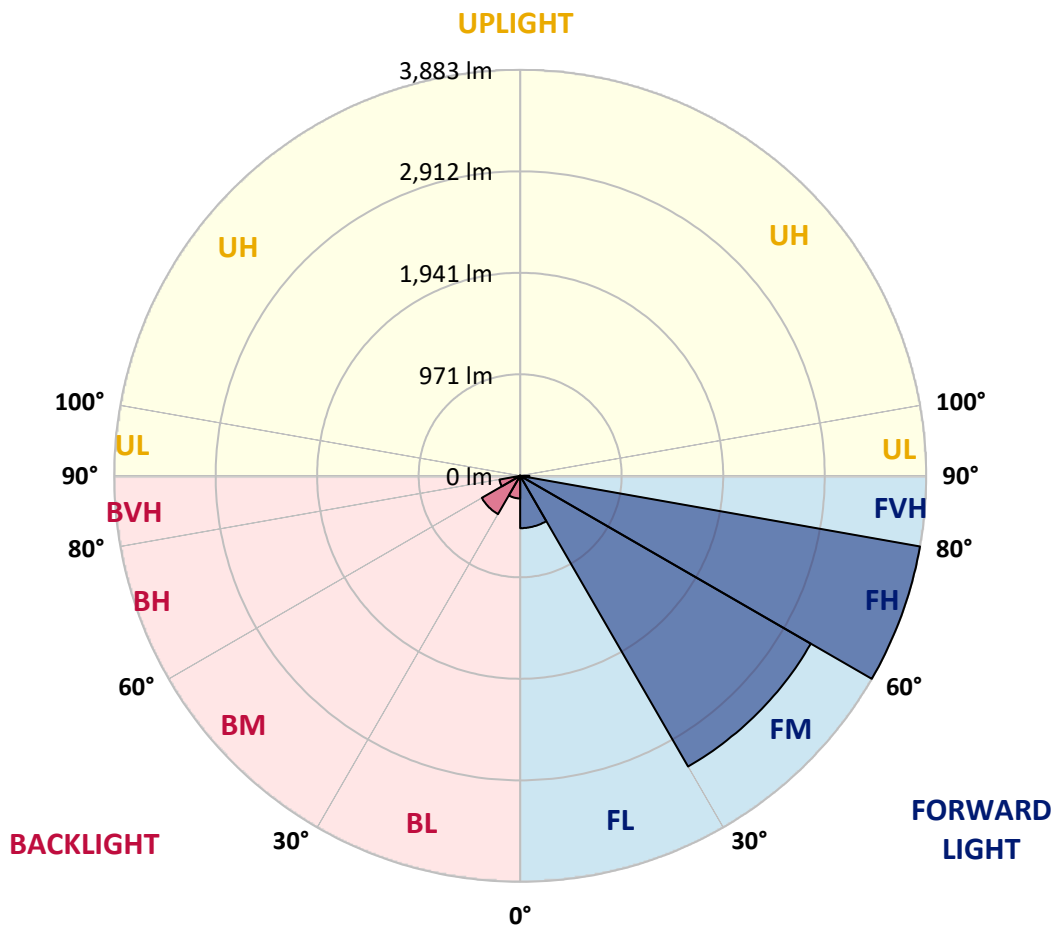
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	500.4	5.9			
FM (30°-60°)	3210.2	37.7			
FH (60°-80°)	3882.6	45.5			G2/5000
FVH (80°-90°)	88.1	1.0			G1/100
BL (0°-30°)	216.5	2.5	B1/500		
BM (30°-60°)	423.3	5.0	B1/1000		
BH (60°-80°)	201.9	2.4	B1/500		G1/500
BVH (80°-90°)	3.1	0.0			G0/10
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°	46°	55°	65°	75°	85°
0°	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3
2.5°	897.7	881.9	878.8	875.6	866.2	853.6	856.7	847.3	831.5	822.1	812.6
5°	1007.9	992.2	985.9	967.0	948.1	919.7	919.7	894.5	866.2	841.0	815.8
7.5°	1121.3	1108.7	1096.1	1067.8	1039.4	1001.6	998.5	960.7	916.6	878.8	837.8
10°	1215.8	1206.3	1190.6	1155.9	1118.2	1077.2	1067.8	1033.1	976.4	926.0	872.5
12.5°	1291.4	1281.9	1259.9	1225.2	1178.0	1137.1	1133.9	1089.8	1033.1	979.6	913.4
15°	1348.1	1332.3	1307.1	1269.3	1222.1	1184.3	1178.0	1140.2	1086.7	1026.8	948.1
17.5°	1357.5	1348.1	1326.0	1285.1	1244.1	1212.6	1209.5	1181.1	1133.9	1070.9	989.0
20°	1332.3	1329.2	1310.3	1278.8	1247.3	1231.5	1228.4	1209.5	1171.7	1115.0	1033.1
22.5°	1294.5	1291.4	1278.8	1263.0	1250.4	1247.3	1247.3	1241.0	1218.9	1165.4	1089.8
25°	1269.3	1266.2	1259.9	1250.4	1250.4	1269.3	1272.5	1278.8	1259.9	1218.9	1137.1
27.5°	1272.5	1266.2	1259.9	1250.4	1263.0	1297.7	1300.8	1316.6	1300.8	1263.0	1190.6
30°	1316.6	1307.1	1288.2	1266.2	1281.9	1329.2	1332.3	1351.2	1338.6	1319.7	1250.4
32.5°	1385.9	1379.6	1341.8	1304.0	1313.4	1360.7	1367.0	1401.6	1417.4	1389.0	1304.0
35°	1486.7	1464.6	1417.4	1379.6	1373.3	1407.9	1417.4	1474.1	1515.0	1445.7	1335.5
37.5°	1568.6	1549.7	1474.1	1414.2	1448.9	1527.6	1530.8	1600.1	1565.4	1452.0	1385.9
40°	1845.7	1842.6	1710.3	1521.3	1483.5	1571.7	1584.3	1596.9	1581.2	1524.5	1496.1
42.5°	2293.0	2255.2	2107.2	1817.4	1559.1	1568.6	1574.9	1641.0	1722.9	1697.7	1707.2
45°	2778.1	2746.6	2579.6	2214.3	1817.4	1738.6	1744.9	1852.0	2009.5	2041.0	2091.4
47.5°	3225.3	3174.9	3080.4	2711.9	2258.4	2028.4	2041.0	2170.2	2431.6	2500.9	2579.6
50°	3603.3	3568.6	3480.4	3237.9	2800.1	2485.1	2497.7	2604.8	2945.0	3055.2	3156.0
52.5°	4151.3	4104.1	3934.0	3820.6	3489.9	3080.4	3052.1	3165.5	3556.0	3628.5	3763.9
55°	4655.3	4557.7	4456.9	4409.6	4271.0	3792.3	3782.8	3804.9	4129.3	4167.1	4409.6
57.5°	4869.5	4850.6	4935.6	5093.1	5124.6	4630.1	4589.2	4504.1	4759.2	4756.1	5039.6
60°	5004.9	5004.9	5231.7	5622.3	5874.2	5524.6	5467.9	5203.3	5294.7	5297.8	5559.3
62.5°	4919.9	4941.9	5294.7	5883.7	6390.8	6283.7	6245.9	5801.8	5795.5	5723.1	5814.4
65°	4393.9	4431.7	4998.6	5738.8	6579.8	6831.8	6816.0	6312.1	6129.4	5864.8	5660.1
67°	3584.4	3653.7	4340.3	5215.9	6365.6	7020.7	7023.9	6532.5	6132.5	5628.6	5115.2
67.5°	3389.1	3439.5	4034.8	5027.0	6249.1	7023.9	7023.9	6560.9	6113.6	5556.1	4926.2
70°	2160.7	2173.3	2822.2	3889.9	5338.8	6683.7	6708.9	6346.7	5568.7	4497.8	3458.4
72.5°	1067.8	1039.4	1489.8	2504.0	4006.5	5719.9	5786.0	5420.7	4406.5	2938.7	1826.8
75°	418.9	447.3	648.8	1332.3	2510.3	4312.0	4362.4	3943.5	2834.8	1515.0	721.3
77.5°	185.8	185.8	277.2	598.4	1319.7	2645.8	2671.0	2406.4	1496.1	623.6	220.5
80°	100.8	107.1	144.9	261.4	664.6	1215.8	1326.0	1193.7	677.2	274.0	75.6
82.5°	50.4	53.5	88.2	148.0	333.9	459.9	485.1	507.1	311.8	170.1	31.5
85°	18.9	22.0	47.2	85.0	151.2	154.3	154.3	198.4	170.1	129.1	15.7
87.5°	3.1	6.3	22.0	34.6	59.8	53.5	47.2	63.0	94.5	81.9	9.4
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°	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3	806.3
2.5°	806.3	800.0	787.4	778.0	771.7	765.4	759.1	759.1	755.9	755.9	759.1
5°	806.3	793.7	768.5	752.8	740.2	730.7	724.4	724.4	721.3	724.4	727.6
7.5°	822.1	803.2	768.5	740.2	724.4	708.7	702.4	699.2	699.2	702.4	699.2
10°	847.3	822.1	778.0	740.2	718.1	696.1	661.4	629.9	601.6	589.0	585.8
12.5°	878.8	847.3	793.7	749.6	715.0	639.4	544.9	485.1	447.3	428.4	422.1
15°	913.4	875.6	812.6	762.2	667.7	526.0	403.2	337.0	315.0	318.1	321.3
17.5°	951.2	910.3	841.0	755.9	573.3	390.6	296.1	280.3	289.8	299.2	299.2
20°	989.0	944.9	869.3	708.7	450.4	289.8	264.6	267.7	277.2	286.6	286.6
22.5°	1039.4	992.2	897.7	626.8	333.9	252.0	252.0	258.3	264.6	274.0	274.0
25°	1093.0	1045.7	916.6	526.0	248.8	236.2	239.4	245.7	252.0	261.4	261.4
27.5°	1149.7	1102.4	913.4	406.3	217.3	217.3	220.5	229.9	236.2	245.7	245.7
30°	1212.6	1171.7	878.8	296.1	201.6	198.4	198.4	207.9	217.3	223.6	226.8
32.5°	1266.2	1231.5	818.9	223.6	189.0	182.7	179.5	182.7	192.1	198.4	201.6
35°	1310.3	1297.7	730.7	192.1	176.4	166.9	160.6	157.5	160.6	160.6	163.8
37.5°	1392.2	1395.3	626.8	179.5	166.9	154.3	141.7	132.3	126.0	122.8	119.7
40°	1546.5	1543.4	516.6	170.1	157.5	141.7	122.8	110.2	94.5	88.2	88.2
42.5°	1763.8	1716.6	393.7	160.6	148.0	129.1	103.9	85.0	69.3	66.1	66.1
45°	2154.4	1959.1	296.1	154.3	138.6	113.4	85.0	63.0	53.5	50.4	50.4
47.5°	2585.9	2239.5	236.2	144.9	129.1	100.8	66.1	50.4	40.9	40.9	40.9
50°	3061.5	2507.2	198.4	135.4	113.4	85.0	53.5	40.9	37.8	34.6	37.8
52.5°	3581.2	2718.2	173.2	122.8	97.6	69.3	44.1	37.8	31.5	31.5	31.5
55°	4047.4	2860.0	144.9	107.1	81.9	56.7	40.9	31.5	28.3	25.2	22.0
57.5°	4469.5	2935.5	116.5	91.3	63.0	47.2	34.6	25.2	22.0	15.7	15.7
60°	4686.8	2866.3	91.3	72.4	50.4	37.8	28.3	22.0	15.7	9.4	9.4
62.5°	4721.4	2686.7	72.4	56.7	44.1	31.5	22.0	15.7	9.4	6.3	6.3
65°	4419.1	2371.7	59.8	47.2	34.6	25.2	18.9	12.6	6.3	3.1	3.1
67°	3877.3	2041.0	53.5	40.9	31.5	22.0	15.7	9.4	6.3	3.1	0.0
67.5°	3770.2	1981.2	50.4	40.9	31.5	22.0	15.7	9.4	6.3	3.1	0.0
70°	2475.7	1370.1	47.2	37.8	28.3	18.9	12.6	9.4	3.1	0.0	0.0
72.5°	1351.2	689.8	44.1	34.6	25.2	18.9	12.6	6.3	3.1	0.0	0.0
75°	494.5	261.4	37.8	31.5	22.0	18.9	12.6	6.3	3.1	0.0	0.0
77.5°	166.9	91.3	34.6	31.5	25.2	18.9	12.6	6.3	3.1	0.0	0.0
80°	56.7	40.9	28.3	25.2	18.9	15.7	12.6	6.3	3.1	0.0	0.0
82.5°	22.0	12.6	9.4	9.4	9.4	12.6	12.6	9.4	3.1	0.0	0.0
85°	9.4	6.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	0.0
87.5°	9.4	6.3	3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
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)