

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: P398045

Luminaire Tested: **ARCH-S-PA1-80-727-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398045
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-PA1-80-727-U-T3
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: 9101 lumens
Efficiency: N/A
Efficacy: 109.7 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): 83
Input Voltage (V): NR
Input Current (A_{in}): 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

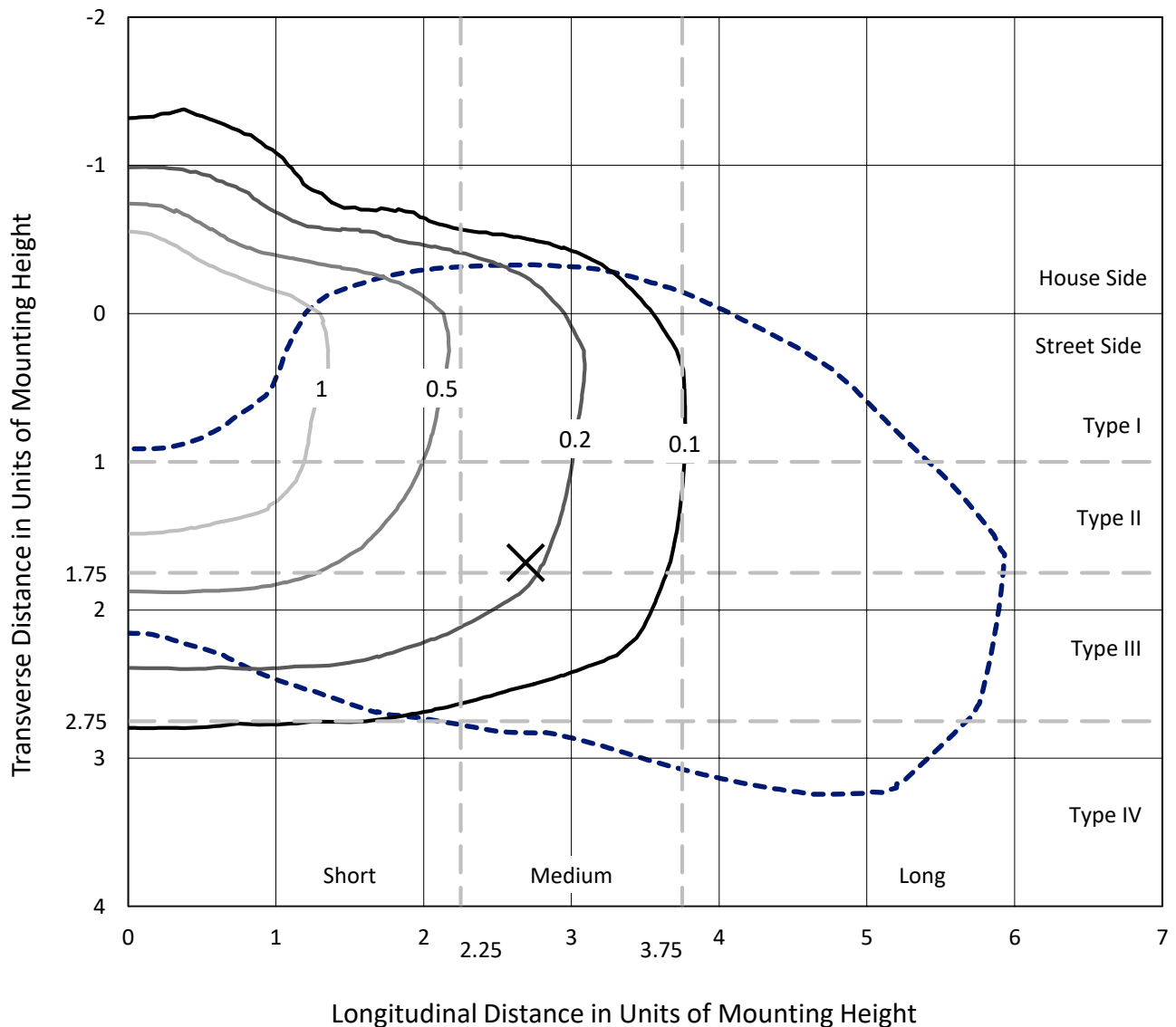


REPORT NUMBER: P398045

CATALOG NUMBER: ARCH-S-PA1-80-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

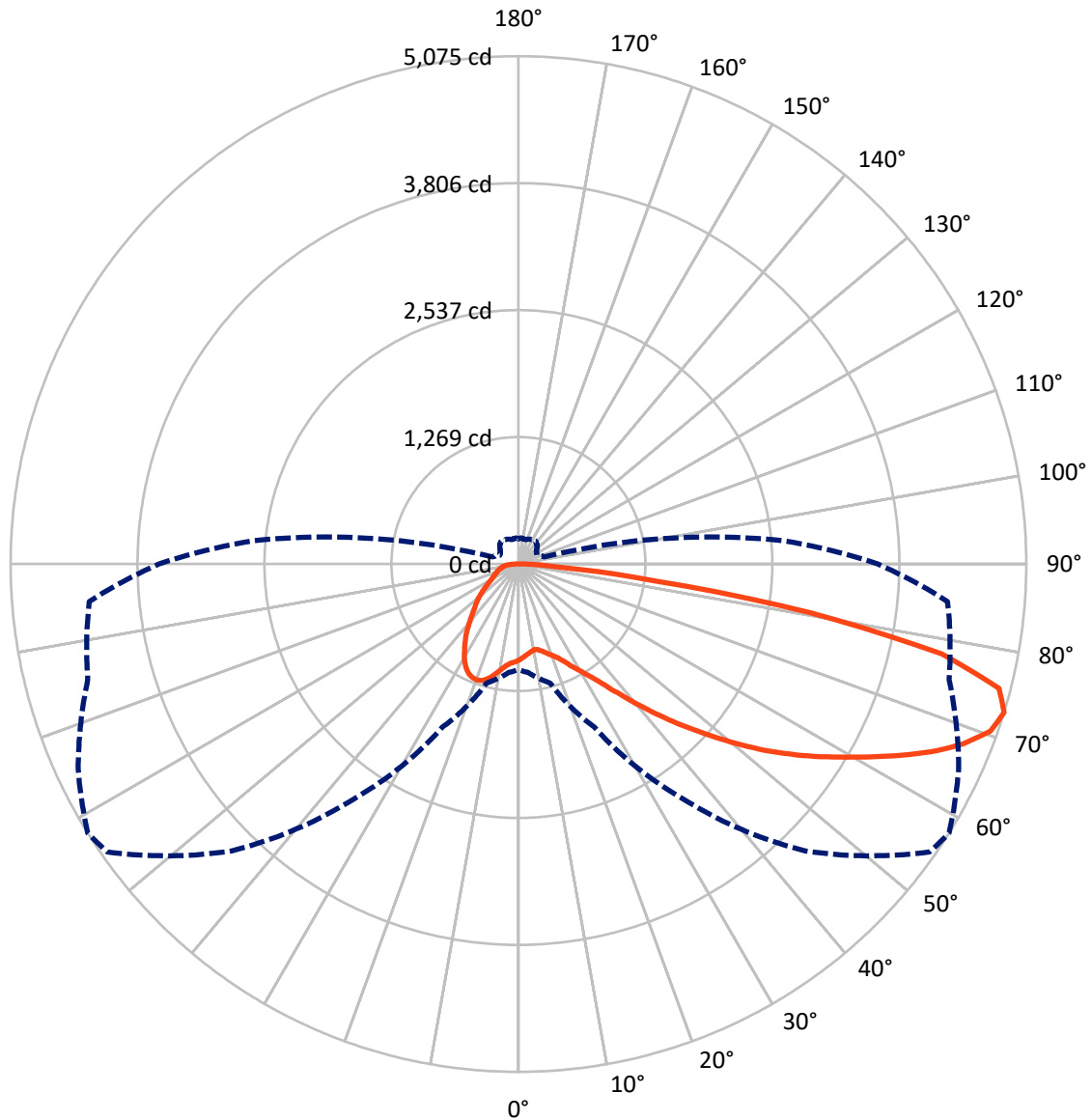


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398045

CATALOG NUMBER: ARCH-S-PA1-80-727-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P398045

CATALOG NUMBER: ARCH-S-PA1-80-727-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2064.0	0.0	2064.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7037.0	0.0	7037.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	9101.0	0.0	9101.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.5	1.0
10°-20°	293.7	3.2
20°-30°	526.1	5.8
30°-40°	791.4	8.7
40°-50°	1281.5	14.1
50°-60°	1929.0	21.2
60°-70°	2270.3	24.9
70°-80°	1609.8	17.7
80°-90°	306.8	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°	9101.0	100.0
0°-180°	9101.0	100.0

Coefficient of Utilization



REPORT NUMBER: P398045

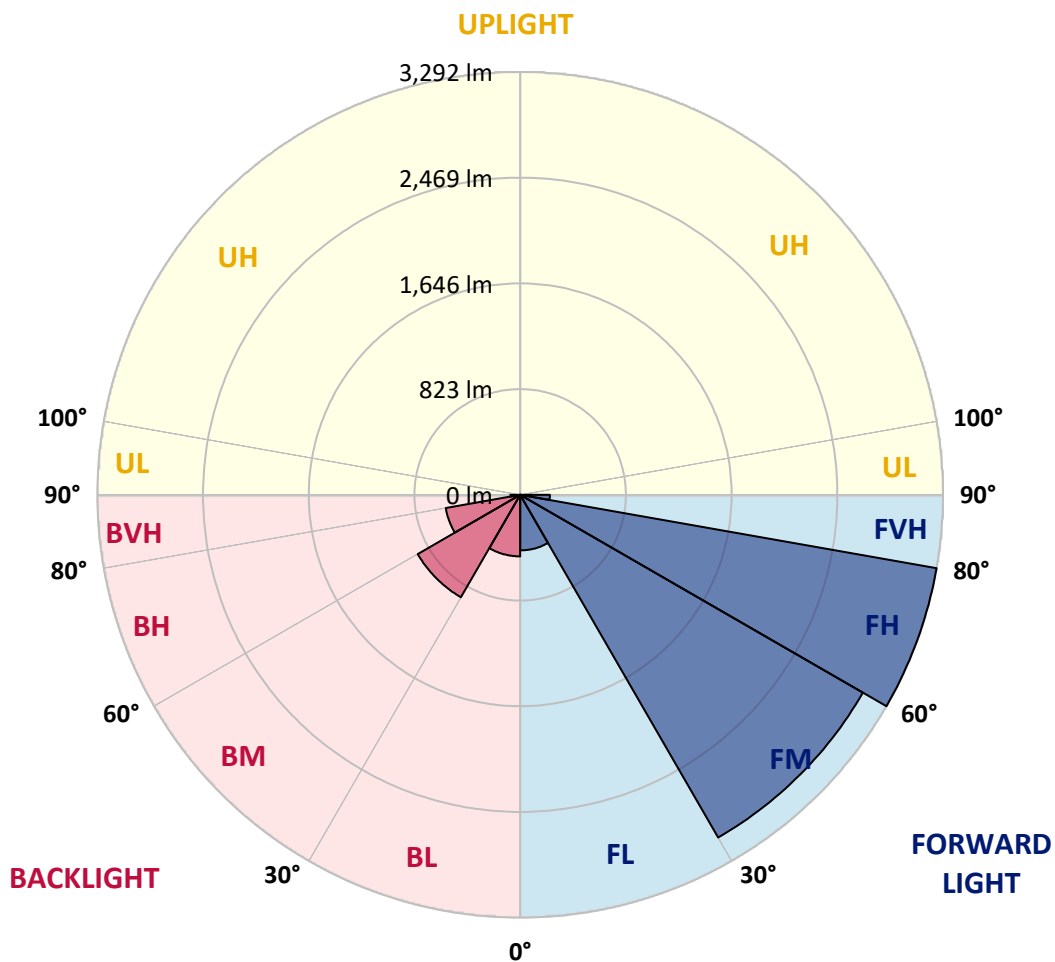
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	432.8	4.8			
FM	(30°-60°)	3080.9	33.9			
FH	(60°-80°)	3291.9	36.2			G2/5000
FVH	(80°-90°)	231.4	2.5			G3/500
BL	(0°-30°)	479.4	5.3	B1/500		
BM	(30°-60°)	920.9	10.1	B1/1000		
BH	(60°-80°)	588.3	6.5	B2/1000		G2/1000
BVH	(80°-90°)	75.4	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-G3

Type IV Medium





REPORT NUMBER: P398045

CATALOG NUMBER: ARCH-S-PA1-80-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0
2.5°	923.9	919.1	920.3	920.3	925.1	927.5	928.7	932.3	934.7	940.7	949.1
5°	880.7	877.1	878.3	879.5	887.9	896.3	903.5	908.3	915.5	925.1	937.1
7.5°	849.4	847.0	848.2	850.6	857.8	867.5	879.5	886.7	897.5	915.5	935.9
10°	826.6	826.6	827.8	832.6	839.8	851.8	861.4	869.9	891.5	923.9	955.2
12.5°	808.6	808.6	812.2	821.8	833.8	845.8	868.7	878.3	907.1	951.6	988.8
15°	807.4	808.6	809.8	818.2	831.4	857.8	891.5	905.9	940.7	993.6	1036.9
17.5°	826.6	827.8	823.0	825.4	841.0	878.3	922.7	939.5	984.0	1041.7	1086.1
20°	885.5	885.5	871.1	857.8	868.7	909.5	960.0	976.8	1026.0	1089.7	1134.2
22.5°	1005.6	1011.6	978.0	949.1	932.3	955.2	1000.8	1018.8	1074.1	1142.6	1187.0
25°	1151.0	1157.0	1111.3	1070.5	1039.3	1035.7	1065.7	1084.9	1130.6	1201.5	1238.7
27.5°	1291.6	1280.8	1238.7	1200.3	1160.6	1128.2	1151.0	1167.8	1220.7	1274.7	1297.6
30°	1402.1	1393.7	1352.8	1325.2	1288.0	1245.9	1232.7	1250.7	1294.0	1344.4	1356.4
32.5°	1524.6	1518.6	1477.8	1441.7	1410.5	1370.9	1342.0	1350.4	1374.5	1410.5	1417.7
35°	1680.8	1694.1	1650.8	1577.5	1542.7	1504.2	1483.8	1486.2	1504.2	1527.0	1515.0
37.5°	1845.4	1861.1	1863.5	1748.1	1701.3	1666.4	1644.8	1653.2	1674.8	1690.4	1653.2
40°	2150.6	2135.0	2072.5	1987.2	1915.1	1881.5	1851.4	1850.2	1865.9	1893.5	1826.2
42.5°	2555.5	2541.1	2414.9	2304.4	2190.3	2151.8	2092.9	2067.7	2074.9	2109.8	2016.0
45°	2943.6	2937.6	2836.6	2708.1	2571.1	2496.6	2362.1	2300.8	2294.8	2322.4	2210.7
47.5°	3288.4	3261.9	3188.7	3088.9	3074.5	2879.9	2632.4	2549.5	2520.7	2536.3	2411.3
50°	3657.2	3567.1	3466.2	3404.9	3509.4	3328.0	2905.1	2818.6	2747.7	2758.5	2628.8
52.5°	3853.1	3701.7	3635.6	3653.6	3794.2	3724.5	3201.9	3096.1	2982.0	2997.6	2845.0
55°	3684.9	3683.7	3712.5	3824.2	4020.1	3939.6	3484.2	3365.3	3240.3	3243.9	3093.7
57.5°	3454.2	3501.0	3650.0	3896.3	4300.0	4165.4	3761.8	3635.6	3521.5	3503.4	3376.1
60°	3243.9	3295.6	3511.9	3884.3	4397.3	4372.1	4026.1	3915.5	3823.0	3770.2	3672.8
62.5°	2924.3	2962.8	3269.2	3807.4	4315.6	4521.1	4294.0	4218.3	4148.6	4039.3	3992.4
65°	2548.3	2561.5	2884.7	3553.9	4213.5	4578.7	4560.7	4527.1	4459.8	4298.8	4308.4
67.5°	2141.0	2167.4	2451.0	3149.0	3990.0	4552.3	4767.4	4795.0	4715.7	4474.2	4510.3
70°	1707.3	1739.7	1954.8	2589.1	3610.4	4438.2	4958.4	5002.9	4850.3	4531.9	4547.5
72.5°	1056.1	1087.3	1231.5	1798.6	2861.9	4054.9	5017.3	5074.9	4853.9	4455.0	4304.8
75°	365.2	368.8	481.8	862.6	1698.9	3061.3	4825.0	4960.8	4701.3	4175.1	3746.1
77.5°	167.0	173.0	213.9	355.6	753.3	1652.0	3984.0	4324.0	4237.5	3737.7	2883.5
80°	115.3	117.7	147.8	212.7	434.9	581.5	2514.6	2958.0	3109.4	2894.3	1847.8
82.5°	86.5	88.9	114.1	144.2	313.6	282.3	957.6	1374.5	1708.5	1677.2	772.5
85°	82.9	81.7	88.9	96.1	209.1	168.2	310.0	425.3	666.8	570.7	194.6
87.5°	36.0	39.6	91.3	54.1	109.3	78.1	134.6	157.4	203.0	176.6	69.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P398045

CATALOG NUMBER: ARCH-S-PA1-80-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0	960.0
2.5°	952.8	955.2	962.4	973.2	979.2	991.2	999.6	1004.4	1008.0	1009.2	1009.2
5°	944.3	949.1	964.8	982.8	999.6	1024.8	1047.7	1060.9	1070.5	1074.1	1075.3
7.5°	946.7	958.8	981.6	1008.0	1029.6	1062.1	1089.7	1116.2	1137.8	1146.2	1146.2
10°	969.6	986.4	1017.6	1052.5	1080.1	1113.7	1142.6	1165.4	1190.6	1205.1	1207.5
12.5°	1004.4	1024.8	1065.7	1104.1	1135.4	1161.8	1188.2	1205.1	1217.1	1227.9	1230.3
15°	1053.7	1078.9	1119.8	1159.4	1187.0	1203.9	1211.1	1211.1	1209.9	1211.1	1213.5
17.5°	1102.9	1127.0	1167.8	1207.5	1220.7	1211.1	1202.7	1200.3	1199.1	1196.6	1197.8
20°	1151.0	1173.8	1208.7	1238.7	1227.9	1194.2	1183.4	1182.2	1178.6	1176.2	1173.8
22.5°	1199.1	1215.9	1244.7	1255.5	1212.3	1164.2	1151.0	1143.8	1139.0	1133.0	1127.0
25°	1254.3	1259.1	1280.8	1263.9	1173.8	1108.9	1089.7	1078.9	1074.1	1068.1	1063.3
27.5°	1306.0	1306.0	1309.6	1250.7	1117.4	1035.7	1006.8	987.6	986.4	985.2	984.0
30°	1352.8	1346.8	1334.8	1211.1	1044.1	945.5	902.3	883.1	890.3	896.3	897.5
32.5°	1408.1	1396.1	1362.4	1157.0	956.4	844.6	791.8	783.3	791.8	799.0	794.2
35°	1494.6	1473.0	1391.3	1094.5	872.3	752.1	701.6	689.6	687.2	686.0	676.4
37.5°	1618.4	1581.1	1414.1	1027.2	789.4	670.4	633.2	607.9	585.1	561.1	557.5
40°	1769.7	1706.1	1429.7	950.4	701.6	601.9	562.3	529.8	491.4	449.3	444.5
42.5°	1935.5	1840.6	1436.9	865.0	624.8	545.5	496.2	455.4	412.1	379.7	373.7
45°	2114.6	1986.0	1430.9	783.3	562.3	497.4	442.1	397.7	362.8	340.0	335.2
47.5°	2288.8	2153.0	1414.1	718.5	514.2	456.6	400.1	359.2	332.8	307.6	301.6
50°	2512.2	2312.8	1393.7	668.0	461.4	415.7	373.7	330.4	300.4	288.3	285.9
52.5°	2759.7	2472.6	1369.7	604.3	409.7	383.3	356.8	318.4	308.8	285.9	282.3
55°	3027.7	2662.4	1364.9	523.8	364.0	360.4	340.0	329.2	331.6	285.9	279.9
57.5°	3310.0	2865.5	1375.7	443.3	326.8	340.0	347.2	338.8	335.2	292.0	279.9
60°	3604.4	3061.3	1343.2	368.8	298.0	323.2	355.6	334.0	307.6	289.6	281.1
62.5°	3890.3	3225.9	1202.7	316.0	276.3	318.4	350.8	316.0	285.9	285.9	282.3
65°	4098.2	3299.2	940.7	277.5	261.9	312.4	342.4	304.0	279.9	288.3	283.5
67.5°	4122.2	3223.5	632.0	247.5	249.9	301.6	323.2	293.2	273.9	295.6	288.3
70°	3974.4	3026.5	386.9	224.7	234.3	282.3	306.4	282.3	265.5	289.6	278.7
72.5°	3591.1	2658.8	272.7	205.4	217.5	264.3	290.8	272.7	253.5	261.9	251.1
75°	2946.0	2060.5	216.3	187.4	200.6	247.5	277.5	258.3	239.1	235.5	228.3
77.5°	2086.9	1320.4	174.2	173.0	182.6	227.1	259.5	241.5	222.3	215.1	210.3
80°	1200.3	647.6	150.2	156.2	165.8	206.7	237.9	222.3	204.2	193.4	186.2
82.5°	459.0	225.9	132.2	135.8	146.6	185.0	216.3	203.0	185.0	194.6	163.4
85°	149.0	123.7	108.1	111.7	122.5	153.8	191.0	180.2	159.8	141.8	131.0
87.5°	66.1	67.3	57.7	63.7	76.9	102.1	139.4	132.2	116.5	97.3	93.7
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)