

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: P398025

Luminaire Tested: **ARCH-S-PA1-70-830-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398025
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-830-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8019 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

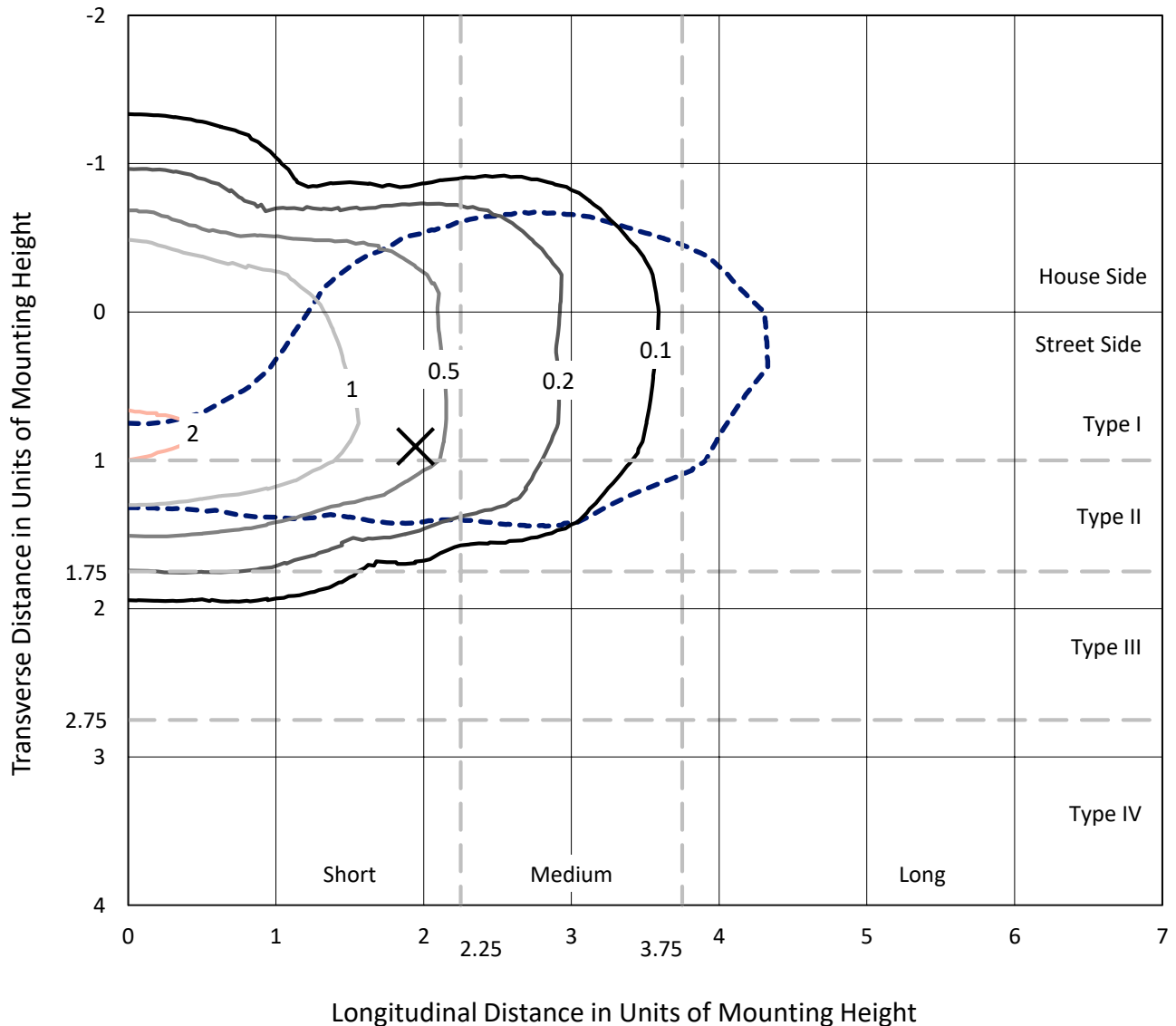
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

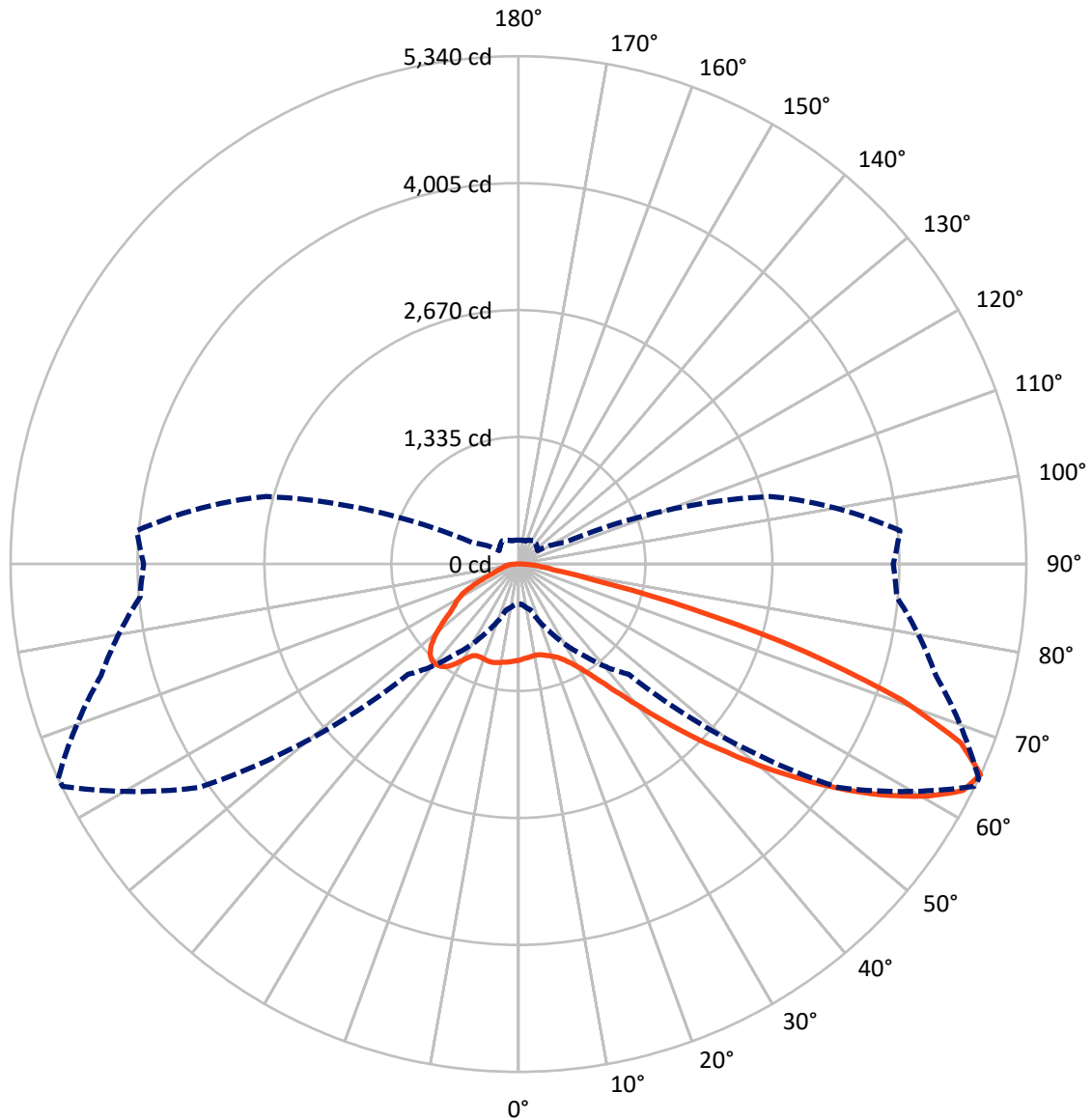
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2318.4	0.0	2318.4
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	5700.6	0.0	5700.6
	% Fixture	71.1	0.0	71.1
Total	Lumens	8019.0	0.0	8019.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	1.2
10°-20°	288.2	3.6
20°-30°	512.0	6.4
30°-40°	866.1	10.8
40°-50°	1507.7	18.8
50°-60°	1948.5	24.3
60°-70°	1705.0	21.3
70°-80°	927.4	11.6
80°-90°	167.6	2.1
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°	8019.0	100.0
0°-180°	8019.0	100.0



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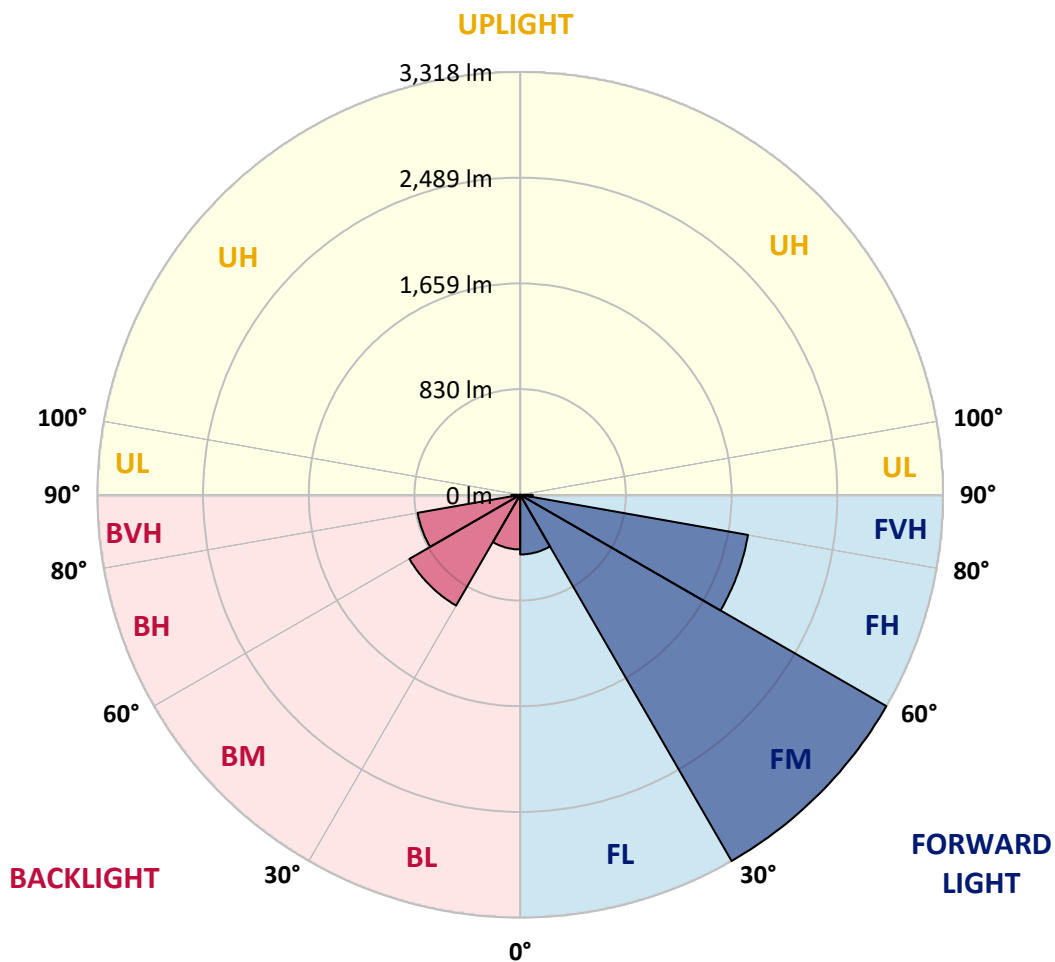
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	467.9	5.8			
FM (30°-60°)	3318.5	41.4			
FH (60°-80°)	1815.6	22.6			G2/5000
FVH (80°-90°)	98.6	1.2			G1/100
BL (0°-30°)	428.8	5.3	B1/500		
BM (30°-60°)	1003.8	12.5	B2/2500		
BH (60°-80°)	816.8	10.2	B2/1000		G2/1000
BVH (80°-90°)	69.0	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3
2.5°	995.3	994.3	992.2	994.3	995.3	997.4	996.4	998.5	997.4	1000.6	1005.9
5°	970.0	967.9	966.8	972.1	975.3	980.6	982.7	990.1	989.0	994.3	1002.7
7.5°	941.5	941.5	940.4	946.8	951.0	960.5	967.9	980.6	981.6	991.1	1000.6
10°	919.3	920.4	919.3	924.6	930.9	942.6	955.2	973.2	974.2	987.9	997.4
12.5°	910.9	910.9	910.9	918.3	926.7	942.6	957.3	976.3	978.4	993.2	1001.7
15°	922.5	923.6	921.4	928.8	938.3	957.3	971.1	991.1	993.2	1006.9	1012.2
17.5°	963.7	967.9	962.6	966.8	964.7	979.5	992.2	1012.2	1013.3	1024.9	1027.0
20°	1044.9	1049.2	1040.7	1035.4	1016.4	1015.4	1020.7	1036.5	1036.5	1043.9	1038.6
22.5°	1170.5	1174.8	1160.0	1139.9	1094.6	1072.4	1060.8	1068.2	1067.1	1070.3	1056.6
25°	1337.3	1336.3	1318.3	1281.4	1208.5	1154.7	1126.2	1114.6	1114.6	1108.3	1091.4
27.5°	1544.2	1528.4	1496.7	1452.4	1351.0	1276.1	1214.9	1185.3	1180.0	1161.0	1129.4
30°	1764.8	1753.2	1707.8	1643.4	1526.2	1430.2	1328.9	1269.8	1266.6	1225.4	1177.9
32.5°	2024.4	2005.4	1954.8	1877.7	1737.3	1602.2	1475.6	1385.9	1380.6	1315.2	1249.7
35°	2358.0	2342.1	2244.0	2166.9	1986.4	1809.1	1659.2	1540.0	1535.7	1455.5	1372.1
37.5°	2758.0	2716.9	2621.9	2477.3	2287.3	2077.2	1887.2	1737.3	1732.1	1643.4	1537.9
40°	3114.8	3077.8	2993.4	2860.4	2656.7	2423.4	2165.9	1984.3	1979.1	1871.4	1738.4
42.5°	3378.6	3353.3	3298.4	3221.4	3075.7	2934.3	2521.6	2283.0	2273.5	2134.2	1968.5
45°	3531.7	3511.6	3480.0	3499.0	3496.9	3470.5	2945.9	2638.7	2608.1	2427.6	2225.0
47.5°	3494.8	3476.8	3489.5	3637.2	3841.0	3994.0	3439.9	3002.9	2961.7	2726.4	2498.4
50°	3227.7	3235.1	3301.6	3584.5	4041.5	4381.4	3987.7	3417.7	3362.8	3027.2	2758.0
52.5°	2741.1	2759.1	2920.6	3316.4	4019.3	4632.6	4482.7	3846.2	3773.4	3320.6	2994.4
55°	2177.5	2222.9	2431.9	2847.7	3730.1	4650.5	4856.3	4276.9	4196.7	3596.1	3200.3
57.5°	1610.7	1678.2	1920.0	2302.0	3176.0	4366.6	5043.2	4688.5	4591.4	3869.5	3417.7
60°	1021.7	1062.9	1341.5	1792.2	2430.8	3672.1	5018.9	5038.9	4954.5	4141.8	3644.6
62.5°	652.3	672.4	812.7	1278.2	1699.4	2719.0	4754.0	5303.9	5246.9	4389.8	3860.0
65°	419.0	427.5	499.3	786.3	1156.8	1641.3	4094.3	5332.4	5339.8	4545.0	3992.9
67.5°	340.9	345.1	371.5	485.5	818.0	906.7	2852.0	4927.1	5016.8	4504.9	3947.6
70°	310.3	315.6	343.0	387.4	633.3	625.9	1380.6	4122.8	4269.5	4273.7	3746.0
72.5°	261.8	269.2	306.1	366.3	489.8	494.0	584.7	2936.4	3152.8	3819.8	3443.0
75°	218.5	222.7	254.4	323.0	414.8	394.8	410.6	1556.9	1869.3	3063.1	3121.1
77.5°	177.3	181.5	204.8	257.5	368.4	307.1	323.0	644.9	796.9	2079.3	2551.1
80°	126.7	130.9	157.3	200.5	278.7	276.5	239.6	355.7	386.3	1124.1	1657.1
82.5°	90.8	93.9	119.3	143.5	193.2	277.6	180.5	241.7	253.3	498.2	668.1
85°	61.2	61.2	82.3	95.0	124.5	175.2	145.7	163.6	171.0	236.4	180.5
87.5°	26.4	26.4	44.3	48.6	65.4	81.3	108.7	82.3	84.4	127.7	73.9
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°	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3	1013.3
2.5°	1009.1	1010.1	1012.2	1018.6	1022.8	1029.1	1032.3	1036.5	1036.5	1034.4	1035.4
5°	1006.9	1010.1	1017.5	1029.1	1036.5	1048.1	1056.6	1062.9	1065.0	1062.9	1063.9
7.5°	1005.9	1011.2	1023.8	1040.7	1051.3	1066.1	1077.7	1085.1	1090.3	1088.2	1089.3
10°	1002.7	1011.2	1027.0	1048.1	1063.9	1078.7	1089.3	1092.4	1095.6	1093.5	1092.4
12.5°	1006.9	1016.4	1033.3	1058.7	1076.6	1088.2	1091.4	1086.1	1078.7	1074.5	1073.4
15°	1015.4	1024.9	1041.8	1068.2	1084.0	1088.2	1080.8	1063.9	1047.1	1037.6	1036.5
17.5°	1027.0	1033.3	1047.1	1070.3	1082.9	1077.7	1062.9	1042.8	1030.2	1022.8	1023.8
20°	1034.4	1034.4	1044.9	1062.9	1073.4	1069.2	1051.3	1029.1	1009.1	999.6	996.4
22.5°	1044.9	1039.7	1040.7	1056.6	1071.3	1065.0	1027.0	987.9	959.4	948.9	947.8
25°	1073.4	1058.7	1049.2	1058.7	1093.5	1041.8	965.8	920.4	894.0	884.5	885.6
27.5°	1108.3	1088.2	1068.2	1084.0	1111.4	989.0	887.7	836.0	820.1	812.7	815.9
30°	1143.1	1116.7	1090.3	1147.3	1098.8	906.7	787.4	736.7	723.0	717.7	722.0
32.5°	1207.5	1164.2	1132.5	1231.8	1059.7	812.7	678.7	632.2	619.6	613.2	611.1
35°	1315.2	1260.3	1228.6	1305.7	1004.8	708.2	579.5	546.7	533.0	519.3	517.2
37.5°	1470.3	1403.8	1375.3	1347.9	927.8	604.8	503.5	481.3	461.3	440.1	439.1
40°	1656.1	1569.5	1548.4	1366.9	821.2	507.7	450.7	429.6	404.3	384.2	385.3
42.5°	1870.3	1759.5	1714.1	1361.6	689.2	456.0	412.7	389.5	367.3	349.4	348.3
45°	2099.4	1973.8	1869.3	1324.6	558.4	420.1	389.5	362.0	339.9	319.8	317.7
47.5°	2352.7	2212.3	2012.8	1252.9	461.3	394.8	375.8	336.7	316.6	304.0	304.0
50°	2608.1	2440.3	2144.8	1144.2	404.3	375.8	355.7	323.0	307.1	296.6	296.6
52.5°	2826.6	2677.8	2253.5	1014.3	368.4	359.9	342.0	316.6	299.8	290.3	289.2
55°	3038.8	2898.4	2350.6	885.6	338.8	338.8	338.8	311.4	292.4	283.9	282.9
57.5°	3249.9	3130.6	2451.9	801.1	312.4	320.9	332.5	305.0	286.0	278.7	277.6
60°	3488.4	3409.3	2569.1	742.0	289.2	301.9	324.0	297.7	275.5	269.2	268.1
62.5°	3741.7	3741.7	2675.7	658.6	268.1	286.0	311.4	288.2	266.0	260.7	259.7
65°	3940.2	4025.7	2744.3	534.1	247.0	270.2	296.6	275.5	253.3	252.3	250.2
67.5°	3963.4	4097.4	2701.0	403.2	228.0	253.3	281.8	261.8	240.7	240.7	237.5
70°	3796.6	3932.8	2565.9	301.9	214.3	236.4	262.8	244.9	224.8	226.9	221.7
72.5°	3518.0	3551.8	2230.3	238.5	198.4	218.5	239.6	225.9	207.9	207.9	200.5
75°	3150.7	2962.8	1620.2	199.5	179.4	197.4	216.4	204.8	188.9	183.7	179.4
77.5°	2507.9	2146.9	941.5	172.0	163.6	177.3	190.0	181.5	167.8	156.2	156.2
80°	1528.4	1258.2	415.9	148.8	144.6	155.2	163.6	154.1	142.5	130.9	127.7
82.5°	581.6	485.5	201.6	127.7	126.7	133.0	139.3	129.8	121.4	116.1	100.3
85°	159.4	146.7	138.3	106.6	104.5	103.4	110.8	106.6	95.0	78.1	69.7
87.5°	60.2	68.6	74.9	65.4	69.7	64.4	73.9	67.6	60.2	39.1	34.8
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)