

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: P214580

Luminaire Tested: **ARCH-AF24-90-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214580
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-90-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8737 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

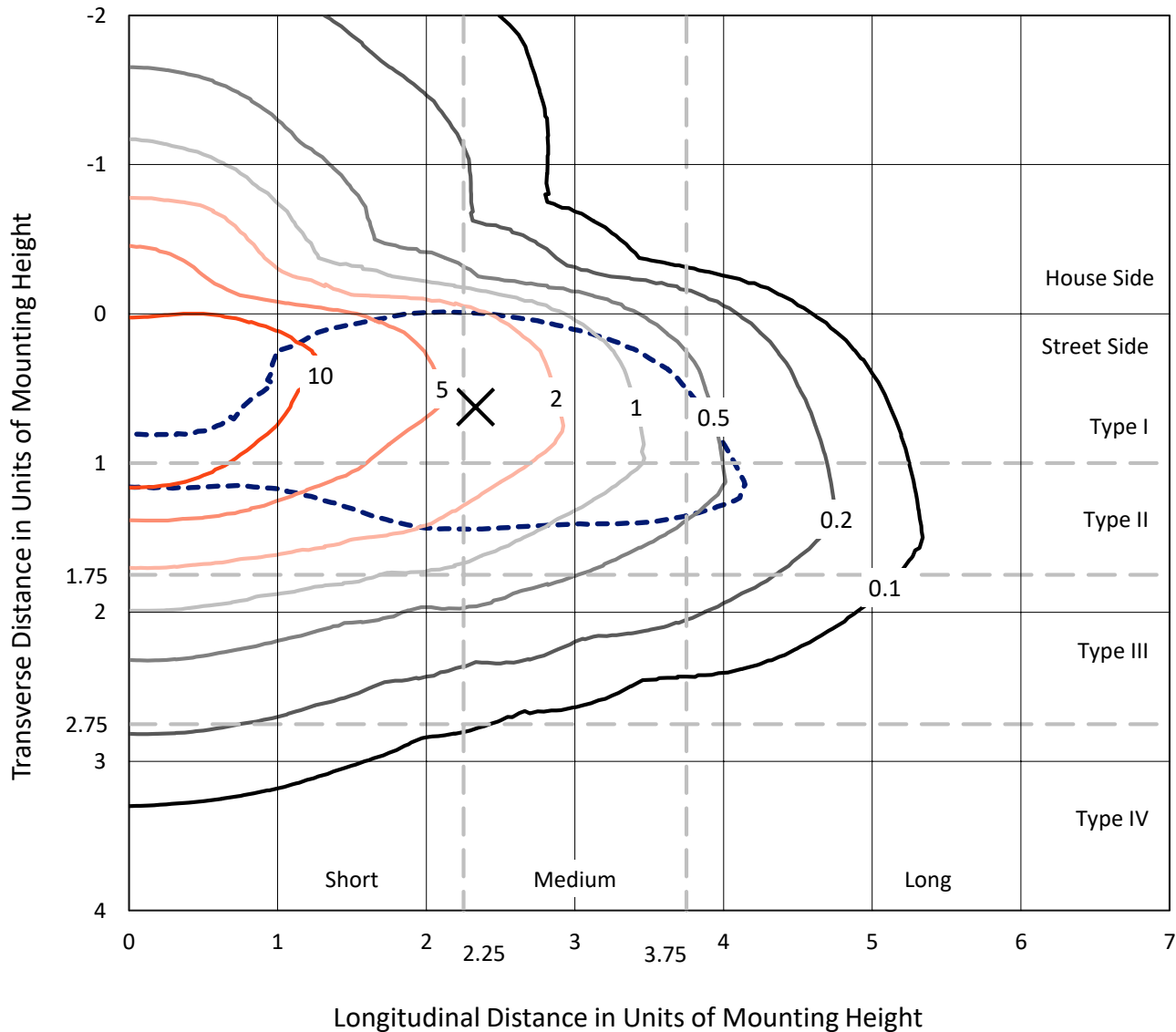
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

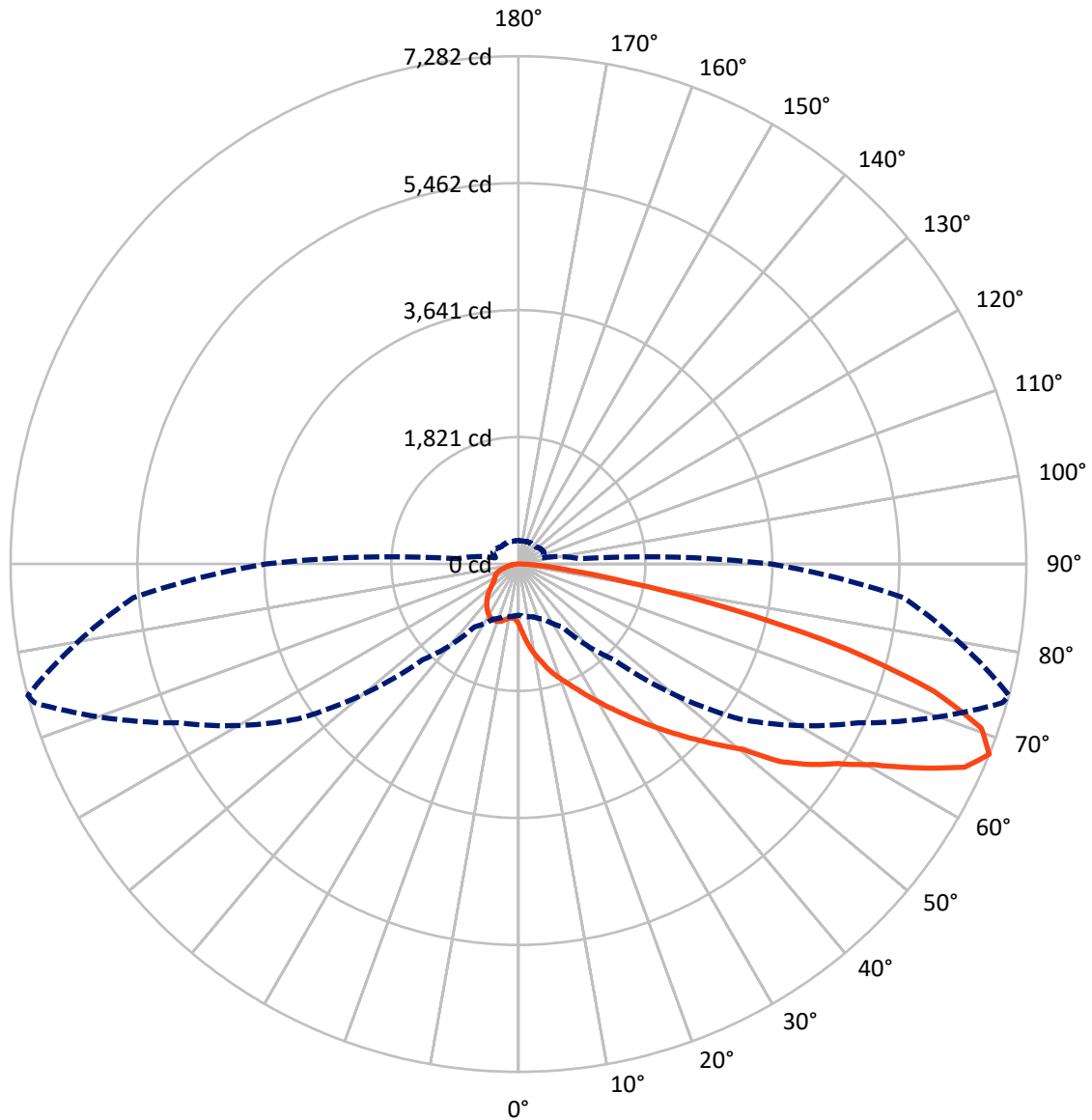
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.1 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1492.0	0.0	1492.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	7245.0	0.0	7245.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	8737.0	0.0	8737.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	1.2
10°-20°	367.6	4.2
20°-30°	670.4	7.7
30°-40°	1100.4	12.6
40°-50°	1591.3	18.2
50°-60°	1875.4	21.5
60°-70°	1822.4	20.9
70°-80°	1013.0	11.6
80°-90°	194.8	2.2
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°	8737.0	100.0
0°-180°	8737.0	100.0

Coefficient of Utilization



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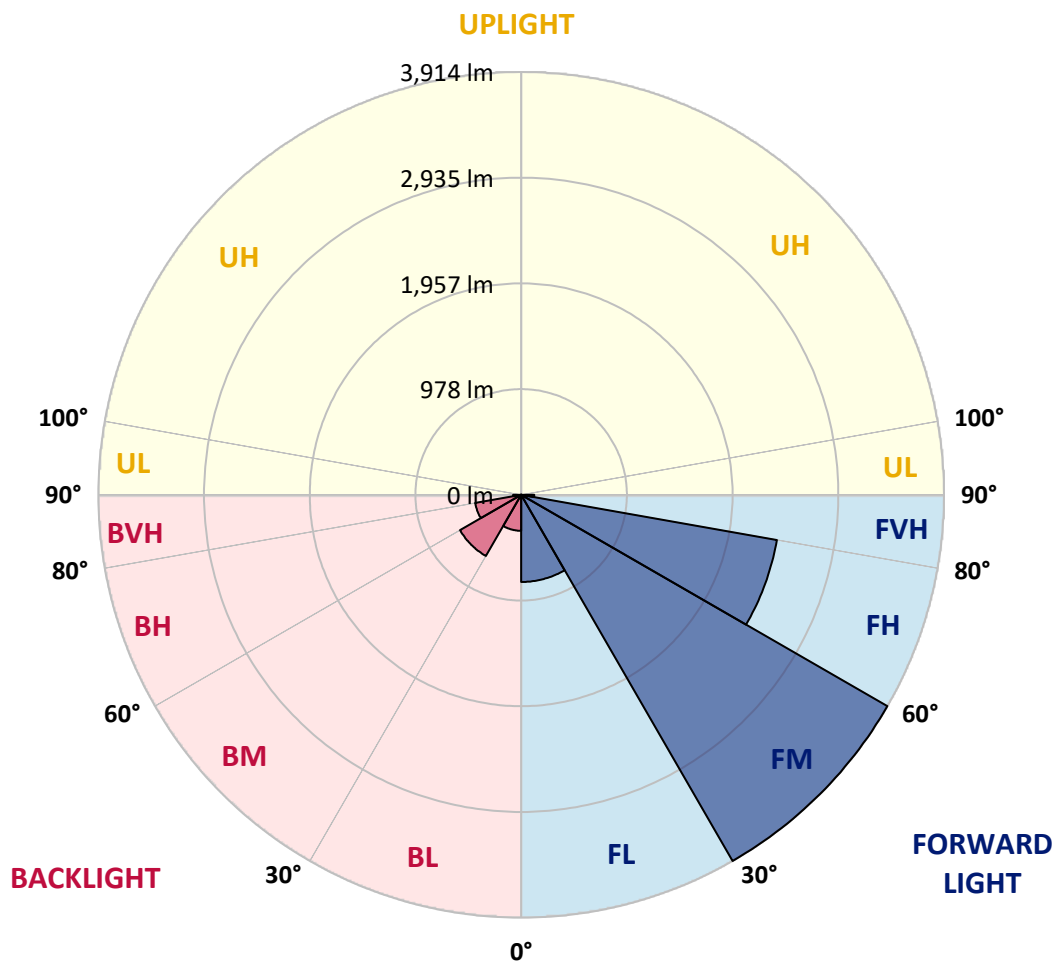
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	806.7	9.2			
FM	(30°-60°)	3913.7	44.8			
FH	(60°-80°)	2403.4	27.5			G2/5000
FVH	(80°-90°)	121.2	1.4			G2/225
BL	(0°-30°)	333.0	3.8	B1/500		
BM	(30°-60°)	653.4	7.5	B1/1000		
BH	(60°-80°)	432.0	4.9	B1/500		G1/500
BVH	(80°-90°)	73.6	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8
2.5°	1227.4	1231.0	1223.7	1207.3	1183.6	1139.7	1101.4	1033.8	973.5	966.2	902.3
5°	1442.9	1446.6	1437.4	1417.3	1391.8	1344.3	1291.3	1203.6	1106.8	1088.6	953.4
7.5°	1590.9	1592.7	1581.7	1561.6	1541.5	1494.1	1441.1	1342.5	1223.7	1209.1	1019.2
10°	1716.9	1720.5	1705.9	1693.1	1671.2	1623.7	1568.9	1464.8	1342.5	1322.4	1086.8
12.5°	1833.8	1837.4	1828.3	1817.3	1810.0	1766.2	1705.9	1581.7	1450.2	1428.3	1167.1
15°	1912.3	1916.0	1917.8	1932.4	1941.5	1910.5	1850.2	1715.1	1567.1	1547.0	1262.1
17.5°	1890.4	1899.5	1926.9	1979.9	2036.5	2038.4	1989.0	1846.6	1682.2	1660.3	1358.9
20°	1826.5	1833.8	1866.7	1947.0	2058.4	2122.4	2118.7	1979.9	1789.9	1766.2	1448.4
22.5°	1879.4	1888.6	1888.6	1937.9	2047.5	2166.2	2213.7	2111.4	1897.7	1875.8	1537.9
25°	2105.9	2111.4	2073.1	2053.0	2093.1	2202.7	2292.2	2253.9	2029.2	2003.6	1634.7
27.5°	2421.9	2412.8	2365.3	2284.9	2241.1	2270.3	2361.6	2389.0	2180.8	2149.8	1735.2
30°	2736.1	2730.6	2675.8	2568.0	2469.4	2407.3	2438.3	2509.6	2345.2	2308.7	1832.0
32.5°	3030.1	3021.0	2960.7	2834.7	2723.3	2608.2	2547.9	2619.2	2520.5	2478.5	1939.7
35°	3300.4	3276.7	3216.4	3084.9	2969.9	2860.3	2712.3	2723.3	2710.5	2666.7	2058.4
37.5°	3519.6	3501.4	3435.6	3313.2	3190.9	3086.7	2931.5	2842.0	2915.1	2873.1	2195.4
40°	3713.2	3693.1	3625.6	3503.2	3389.9	3291.3	3168.9	2986.3	3145.2	3097.7	2348.9
42.5°	3859.4	3844.7	3789.9	3669.4	3559.8	3470.3	3410.0	3168.9	3384.5	3338.8	2516.9
45°	3937.9	3923.3	3894.1	3797.2	3696.8	3627.4	3632.9	3386.3	3634.7	3596.3	2716.0
47.5°	3841.1	3852.0	3877.6	3859.4	3797.2	3764.4	3832.0	3610.9	3914.1	3877.6	2931.5
50°	3581.7	3592.7	3695.0	3821.0	3842.9	3883.1	4010.9	3870.3	4210.0	4180.8	3198.2
52.5°	2944.3	3004.6	3287.7	3589.0	3795.4	3961.6	4210.0	4255.7	4708.7	4708.7	3669.4
55°	2224.7	2277.6	2600.9	3126.9	3610.9	3968.9	4356.2	4516.9	5068.5	5075.8	3916.0
57.5°	1802.7	1835.6	1994.5	2533.3	3223.7	3877.6	4529.7	4741.5	5368.0	5400.9	4233.8
60°	1463.0	1481.3	1585.4	1959.8	2688.6	3631.0	4653.9	5063.0	5795.4	5841.1	4639.3
62.5°	1176.3	1194.5	1263.9	1488.6	2109.6	3168.9	4632.0	5397.2	6365.3	6440.2	5170.8
65°	938.8	958.9	1004.6	1143.4	1563.5	2595.4	4407.3	5568.9	6955.2	7028.3	5523.3
67.5°	732.4	750.7	781.7	873.1	1101.4	1941.5	3875.8	5388.1	7220.1	7282.2	5541.5
70°	553.4	562.6	588.1	646.6	787.2	1289.5	3033.8	4781.7	6982.6	7039.3	5176.2
72.5°	429.2	427.4	442.0	471.2	549.8	887.7	2011.0	3888.6	6173.5	6231.9	4416.4
75°	350.7	348.9	358.0	367.1	398.2	595.4	1187.2	2927.8	4982.6	4871.2	3313.2
77.5°	295.9	294.1	303.2	305.0	317.8	411.0	675.8	1926.9	3324.2	3132.4	1866.7
80°	250.2	248.4	259.4	263.0	272.1	301.4	389.0	1042.9	1669.4	1581.7	891.3
82.5°	188.1	195.4	215.5	224.7	235.6	222.8	241.1	460.3	774.4	739.7	387.2
85°	91.3	107.8	162.6	180.8	193.6	140.6	164.4	217.4	348.9	332.4	157.1
87.5°	31.1	27.4	96.8	115.1	126.0	63.9	91.3	120.5	144.3	131.5	49.3
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°	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8	865.8
2.5°	874.9	847.5	807.3	776.3	756.2	739.7	732.4	730.6	726.9	725.1	725.1
5°	893.1	843.8	781.7	748.9	739.7	732.4	736.1	737.9	737.9	737.9	737.9
7.5°	920.5	851.1	776.3	754.3	752.5	752.5	763.5	768.9	772.6	772.6	772.6
10°	957.1	863.9	785.4	767.1	772.6	776.3	789.0	796.3	800.0	801.8	803.7
12.5°	1006.4	891.3	803.7	789.0	796.3	798.2	807.3	811.0	814.6	816.4	816.4
15°	1072.1	931.5	832.9	814.6	816.4	814.6	814.6	811.0	809.1	809.1	812.8
17.5°	1139.7	969.9	858.4	832.9	825.6	811.0	800.0	790.9	785.4	781.7	783.6
20°	1207.3	1004.6	873.1	836.5	816.4	792.7	772.6	759.8	752.5	745.2	748.9
22.5°	1274.9	1037.4	878.5	825.6	796.3	761.6	739.7	719.6	703.2	692.2	694.1
25°	1349.8	1074.0	878.5	812.8	768.9	732.4	705.0	672.1	648.4	639.3	642.9
27.5°	1424.7	1105.0	869.4	789.0	737.9	701.4	661.2	622.8	608.2	602.7	604.6
30°	1499.5	1128.8	849.3	759.8	705.0	664.8	611.9	586.3	568.0	553.4	555.2
32.5°	1574.4	1145.2	821.9	723.3	670.3	619.2	575.3	546.1	513.2	495.0	496.8
35°	1660.3	1158.0	789.0	686.8	632.0	579.0	546.1	498.6	463.9	449.3	445.7
37.5°	1749.8	1167.1	754.3	646.6	593.6	549.8	516.9	458.4	425.6	405.5	403.7
40°	1846.6	1170.8	712.3	604.6	557.1	531.5	478.5	434.7	378.1	365.3	365.3
42.5°	1961.6	1168.9	670.3	562.6	516.9	489.5	451.1	431.0	381.7	368.9	361.6
45°	2093.1	1168.9	624.7	513.2	476.7	436.5	420.1	407.3	374.4	379.9	383.6
47.5°	2242.9	1165.3	569.9	473.1	443.8	409.1	400.0	372.6	359.8	363.5	367.1
50°	2449.3	1170.8	520.5	440.2	420.1	390.9	379.9	365.3	359.8	361.6	359.8
52.5°	2736.1	1152.5	473.1	420.1	401.8	363.5	363.5	361.6	363.5	361.6	361.6
55°	2893.1	1112.3	438.4	409.1	389.0	350.7	358.0	361.6	365.3	363.5	363.5
57.5°	3116.0	1084.9	411.0	401.8	381.7	347.0	354.3	361.6	363.5	361.6	361.6
60°	3379.0	1066.7	392.7	403.7	376.3	347.0	356.2	361.6	359.8	358.0	358.0
62.5°	3684.0	1059.4	379.9	409.1	370.8	348.9	356.2	361.6	354.3	352.5	352.5
65°	3799.1	993.6	363.5	412.8	374.4	348.9	354.3	356.2	347.0	345.2	343.4
67.5°	3621.9	880.4	339.7	405.5	385.4	348.9	348.9	347.0	336.1	334.2	330.6
70°	3225.6	730.6	303.2	381.7	392.7	350.7	341.6	332.4	321.5	321.5	314.2
72.5°	2641.1	575.3	255.7	339.7	387.2	356.2	326.9	314.2	301.4	301.4	294.1
75°	1903.2	429.2	204.6	283.1	363.5	354.3	308.7	292.2	277.6	275.8	266.7
77.5°	1084.9	301.4	166.2	221.0	323.3	345.2	292.2	266.7	250.2	244.7	239.3
80°	557.1	202.7	135.2	173.5	268.5	319.6	279.5	237.4	219.2	210.0	200.9
82.5°	264.8	135.2	104.1	127.9	202.7	279.5	263.0	204.6	184.5	173.5	162.6
85°	118.7	80.4	69.4	82.2	144.3	217.4	232.0	168.0	144.3	180.8	133.3
87.5°	38.4	36.5	36.5	38.4	69.4	95.0	169.9	124.2	115.1	95.0	80.4
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)