

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: P214581

Luminaire Tested: **ARCH-AF24-100-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214581
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-AF24-100-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8827 lumens
Efficiency: N/A
Efficacy: 91.9 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

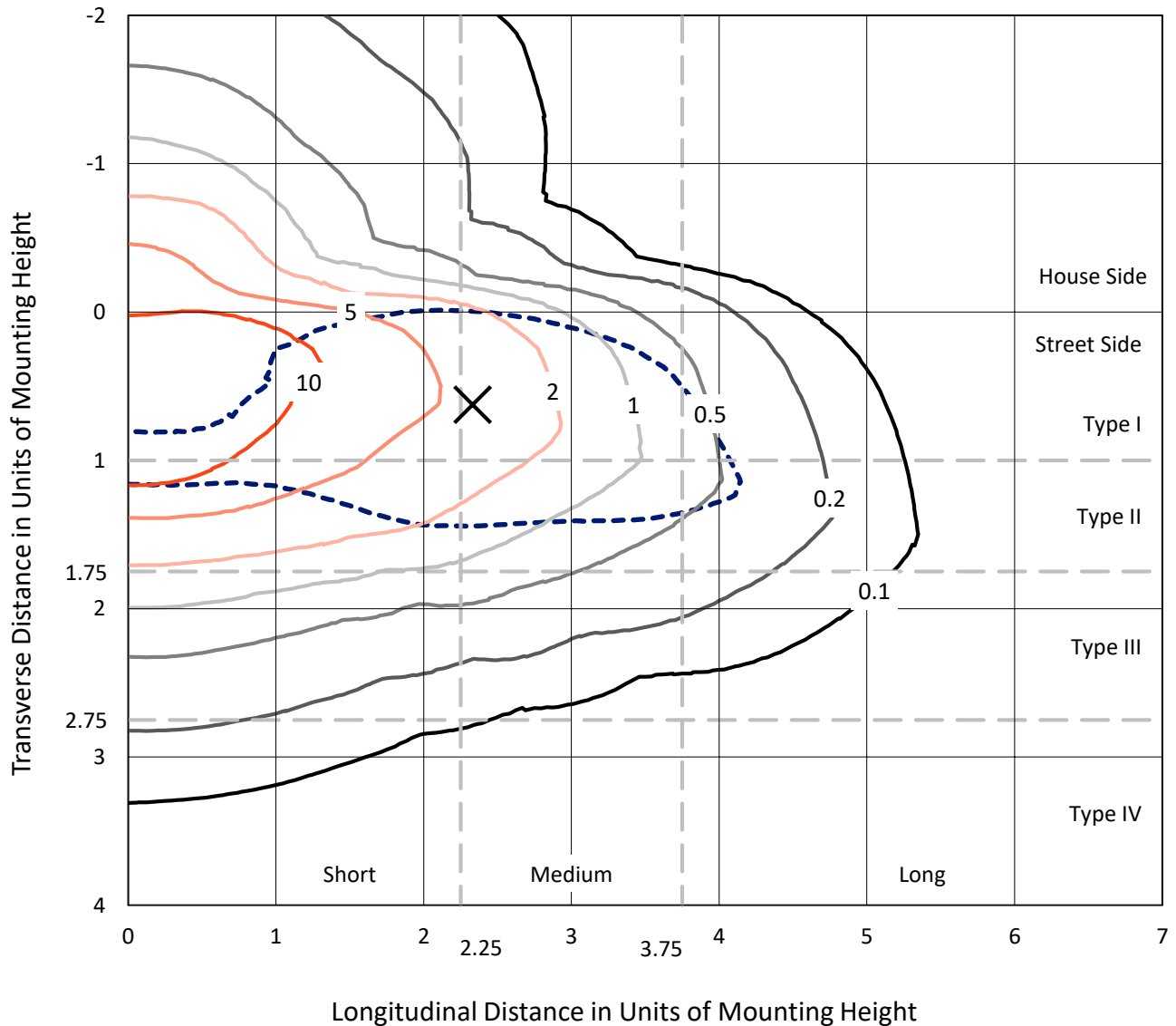
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

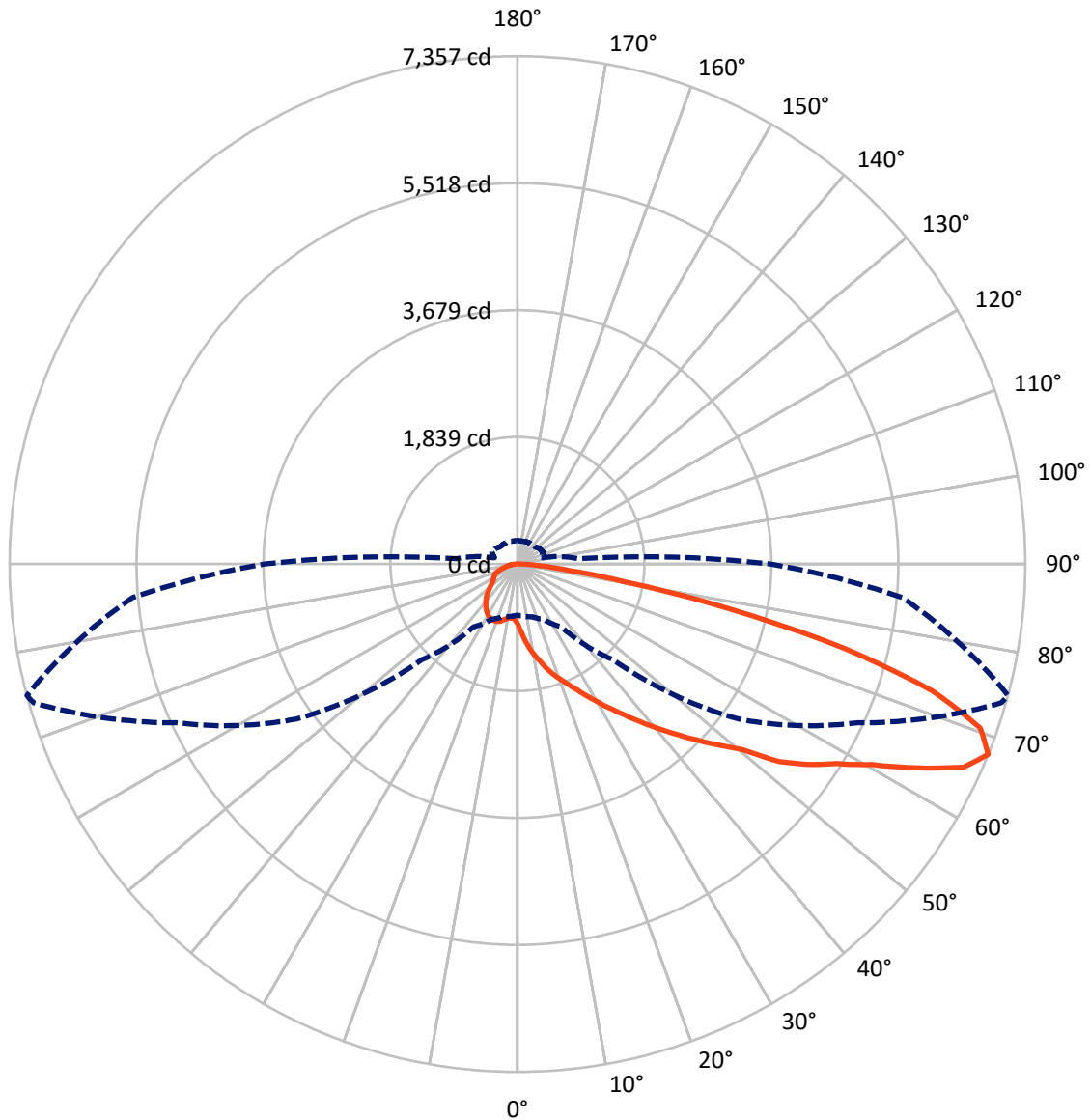


Based on 10 foot mounting height. Maximum calculated value = 18.3 fc
 Type II - Medium - Semi-Cutoff

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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	1507.3	0.0	1507.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	7319.7	0.0	7319.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	8827.0	0.0	8827.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.2
10°-20°	371.3	4.2
20°-30°	677.3	7.7
30°-40°	1111.7	12.6
40°-50°	1607.7	18.2
50°-60°	1894.7	21.5
60°-70°	1841.2	20.9
70°-80°	1023.5	11.6
80°-90°	196.8	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°	8827.0	100.0
0°-180°	8827.0	100.0



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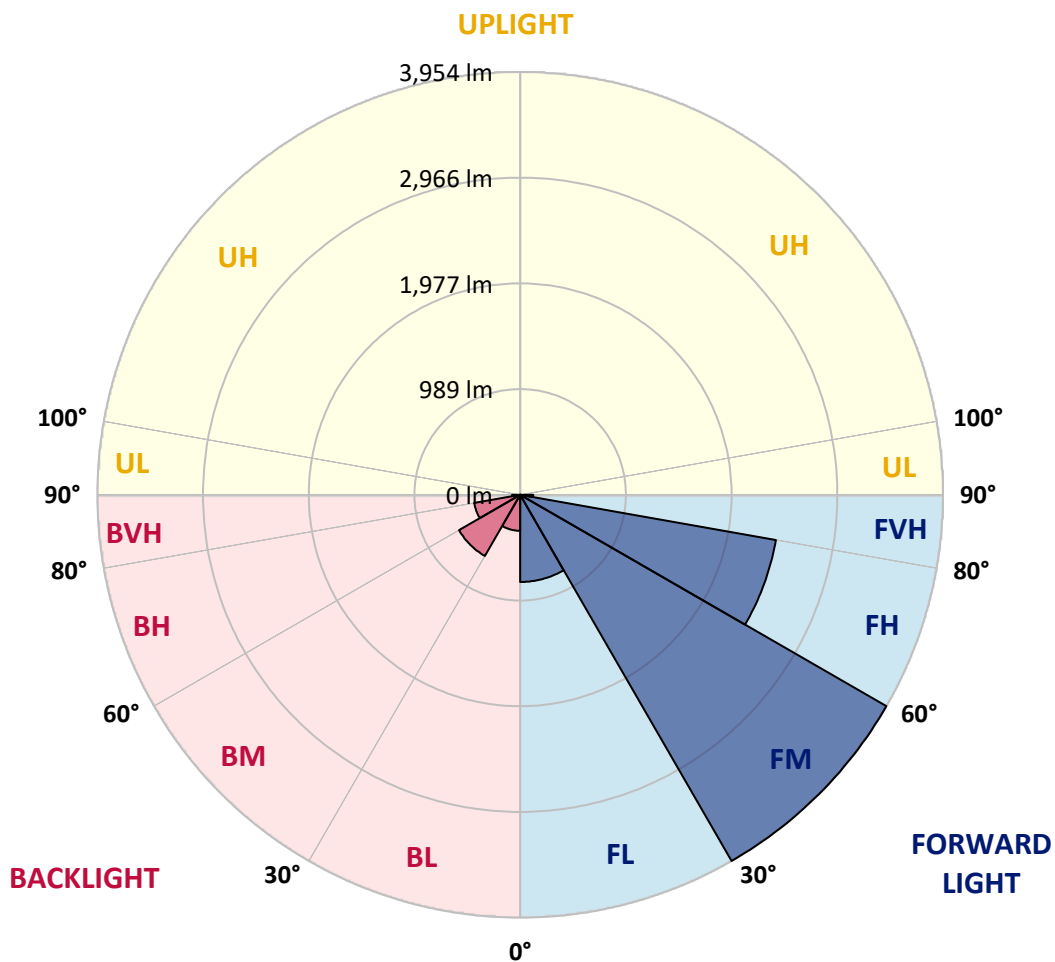
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	815.0	9.2			
FM (30°-60°)	3954.0	44.8			
FH (60°-80°)	2428.2	27.5			G2/5000
FVH (80°-90°)	122.5	1.4			G2/225
BL (0°-30°)	336.4	3.8	B1/500		
BM (30°-60°)	660.1	7.5	B1/1000		
BH (60°-80°)	436.4	4.9	B1/500		G1/500
BVH (80°-90°)	74.3	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°	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7
2.5°	1240.0	1243.7	1236.3	1219.7	1195.8	1151.5	1112.7	1044.4	983.5	976.2	911.6
5°	1457.8	1461.5	1452.2	1431.9	1406.1	1358.1	1304.6	1216.0	1118.2	1099.8	963.2
7.5°	1607.3	1609.1	1598.0	1577.7	1557.4	1509.5	1455.9	1356.3	1236.3	1221.6	1029.7
10°	1734.6	1738.3	1723.5	1710.6	1688.4	1640.5	1585.1	1479.9	1356.3	1336.0	1097.9
12.5°	1852.7	1856.4	1847.1	1836.1	1828.7	1784.4	1723.5	1598.0	1465.2	1443.0	1179.1
15°	1932.0	1935.7	1937.6	1952.3	1961.5	1930.2	1869.3	1732.7	1583.3	1563.0	1275.1
17.5°	1909.9	1919.1	1946.8	2000.3	2057.5	2059.3	2009.5	1865.6	1699.5	1677.4	1372.9
20°	1845.3	1852.7	1885.9	1967.1	2079.6	2144.2	2140.5	2000.3	1808.4	1784.4	1463.3
22.5°	1898.8	1908.0	1908.0	1957.9	2068.6	2188.5	2236.5	2133.2	1917.3	1895.1	1553.7
25°	2127.6	2133.2	2094.4	2074.1	2114.7	2225.4	2315.8	2277.1	2050.1	2024.3	1651.5
27.5°	2446.9	2437.6	2389.7	2308.5	2264.2	2293.7	2386.0	2413.6	2203.3	2171.9	1753.0
30°	2764.2	2758.7	2703.4	2594.5	2494.8	2432.1	2463.5	2535.4	2369.4	2332.5	1850.8
32.5°	3061.3	3052.1	2991.2	2863.9	2751.3	2635.1	2574.2	2646.2	2546.5	2504.1	1959.7
35°	3334.4	3310.5	3249.6	3116.7	3000.4	2889.7	2740.3	2751.3	2738.4	2694.1	2079.6
37.5°	3555.9	3537.4	3471.0	3347.4	3223.7	3118.5	2961.7	2871.3	2945.1	2902.6	2218.0
40°	3751.5	3731.2	3662.9	3539.3	3424.9	3325.2	3201.6	3017.1	3177.6	3129.6	2373.0
42.5°	3899.1	3884.3	3829.0	3707.2	3596.5	3506.1	3445.2	3201.6	3419.3	3373.2	2542.8
45°	3978.5	3963.7	3934.2	3836.4	3734.9	3664.8	3670.3	3421.2	3672.1	3633.4	2744.0
47.5°	3880.7	3891.7	3917.6	3899.1	3836.4	3803.2	3871.4	3648.1	3954.5	3917.6	2961.7
50°	3618.6	3629.7	3733.0	3860.4	3882.5	3923.1	4052.3	3910.2	4253.4	4223.9	3231.1
52.5°	2974.6	3035.5	3321.5	3626.0	3834.5	4002.4	4253.4	4299.5	4757.2	4757.2	3707.2
55°	2247.6	2301.1	2627.7	3159.1	3648.1	4009.8	4401.0	4563.4	5120.7	5128.1	3956.3
57.5°	1821.3	1854.5	2015.1	2559.4	3256.9	3917.6	4576.3	4790.4	5423.3	5456.5	4277.4
60°	1478.1	1496.5	1601.7	1980.0	2716.3	3668.4	4701.8	5115.2	5855.1	5901.2	4687.0
62.5°	1188.4	1206.8	1276.9	1503.9	2131.3	3201.6	4679.7	5452.8	6430.8	6506.5	5224.0
65°	948.5	968.8	1014.9	1155.2	1579.6	2622.2	4452.7	5626.3	7026.9	7100.7	5580.2
67.5°	740.0	758.4	789.8	882.1	1112.7	1961.5	3915.7	5443.6	7294.4	7357.2	5598.6
70°	559.1	568.4	594.2	653.2	795.3	1302.8	3065.0	4831.0	7054.6	7111.8	5229.6
72.5°	433.6	431.8	446.6	476.1	555.4	896.8	2031.7	3928.6	6237.1	6296.1	4461.9
75°	354.3	352.5	361.7	370.9	402.3	601.6	1199.4	2958.0	5034.0	4921.4	3347.4
77.5°	298.9	297.1	306.3	308.2	321.1	415.2	682.8	1946.8	3358.4	3164.7	1885.9
80°	252.8	251.0	262.0	265.7	274.9	304.5	393.0	1053.7	1686.6	1598.0	900.5
82.5°	190.1	197.4	217.7	227.0	238.0	225.1	243.6	465.0	782.4	747.3	391.2
85°	92.3	108.9	164.2	182.7	195.6	142.1	166.1	219.6	352.5	335.8	158.7
87.5°	31.4	27.7	97.8	116.3	127.3	64.6	92.3	121.8	145.8	132.9	49.8
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°	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7	874.7
2.5°	883.9	856.2	815.6	784.2	764.0	747.3	740.0	738.1	734.4	732.6	732.6
5°	902.3	852.5	789.8	756.6	747.3	740.0	743.7	745.5	745.5	745.5	745.5
7.5°	930.0	859.9	784.2	762.1	760.3	760.3	771.3	776.9	780.6	780.6	780.6
10°	966.9	872.8	793.5	775.0	780.6	784.2	797.2	804.5	808.2	810.1	811.9
12.5°	1016.8	900.5	811.9	797.2	804.5	806.4	815.6	819.3	823.0	824.8	824.8
15°	1083.2	941.1	841.5	823.0	824.8	823.0	823.0	819.3	817.5	817.5	821.2
17.5°	1151.5	979.9	867.3	841.5	834.1	819.3	808.2	799.0	793.5	789.8	791.6
20°	1219.7	1014.9	882.1	845.1	824.8	800.9	780.6	767.6	760.3	752.9	756.6
22.5°	1288.0	1048.1	887.6	834.1	804.5	769.5	747.3	727.0	710.4	699.4	701.2
25°	1363.7	1085.0	887.6	821.2	776.9	740.0	712.3	679.1	655.1	645.9	649.5
27.5°	1439.3	1116.4	878.4	797.2	745.5	708.6	668.0	629.2	614.5	608.9	610.8
30°	1515.0	1140.4	858.1	767.6	712.3	671.7	618.2	592.3	573.9	559.1	561.0
32.5°	1590.6	1157.0	830.4	730.7	677.2	625.6	581.3	551.7	518.5	500.1	501.9
35°	1677.4	1169.9	797.2	693.8	638.5	585.0	551.7	503.8	468.7	453.9	450.3
37.5°	1767.8	1179.1	762.1	653.2	599.7	555.4	522.2	463.2	430.0	409.7	407.8
40°	1865.6	1182.8	719.7	610.8	562.8	537.0	483.5	439.2	382.0	369.1	369.1
42.5°	1981.8	1181.0	677.2	568.4	522.2	494.5	455.8	435.5	385.7	372.7	365.4
45°	2114.7	1181.0	631.1	518.5	481.6	441.0	424.4	411.5	378.3	383.8	387.5
47.5°	2266.0	1177.3	575.7	477.9	448.4	413.3	404.1	376.4	363.5	367.2	370.9
50°	2474.5	1182.8	525.9	444.7	424.4	394.9	383.8	369.1	363.5	365.4	363.5
52.5°	2764.2	1164.4	477.9	424.4	406.0	367.2	367.2	365.4	367.2	365.4	365.4
55°	2922.9	1123.8	442.9	413.3	393.0	354.3	361.7	365.4	369.1	367.2	367.2
57.5°	3148.1	1096.1	415.2	406.0	385.7	350.6	358.0	365.4	367.2	365.4	365.4
60°	3413.8	1077.7	396.7	407.8	380.1	350.6	359.8	365.4	363.5	361.7	361.7
62.5°	3722.0	1070.3	383.8	413.3	374.6	352.5	359.8	365.4	358.0	356.1	356.1
65°	3838.2	1003.8	367.2	417.0	378.3	352.5	358.0	359.8	350.6	348.8	346.9
67.5°	3659.2	889.4	343.2	409.7	389.4	352.5	352.5	350.6	339.5	337.7	334.0
70°	3258.8	738.1	306.3	385.7	396.7	354.3	345.1	335.8	324.8	324.8	317.4
72.5°	2668.3	581.3	258.3	343.2	391.2	359.8	330.3	317.4	304.5	304.5	297.1
75°	1922.8	433.6	206.7	286.0	367.2	358.0	311.9	295.2	280.5	278.6	269.4
77.5°	1096.1	304.5	167.9	223.3	326.6	348.8	295.2	269.4	252.8	247.3	241.7
80°	562.8	204.8	136.6	175.3	271.3	322.9	282.3	239.9	221.4	212.2	203.0
82.5°	267.6	136.6	105.2	129.2	204.8	282.3	265.7	206.7	186.4	175.3	164.2
85°	119.9	81.2	70.1	83.0	145.8	219.6	234.4	169.8	145.8	182.7	134.7
87.5°	38.8	36.9	36.9	38.8	70.1	96.0	171.6	125.5	116.3	96.0	81.2
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)