

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: P198680

Luminaire Tested: **XNV-AF-01-LED-U-AFL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-AFL-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6953 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

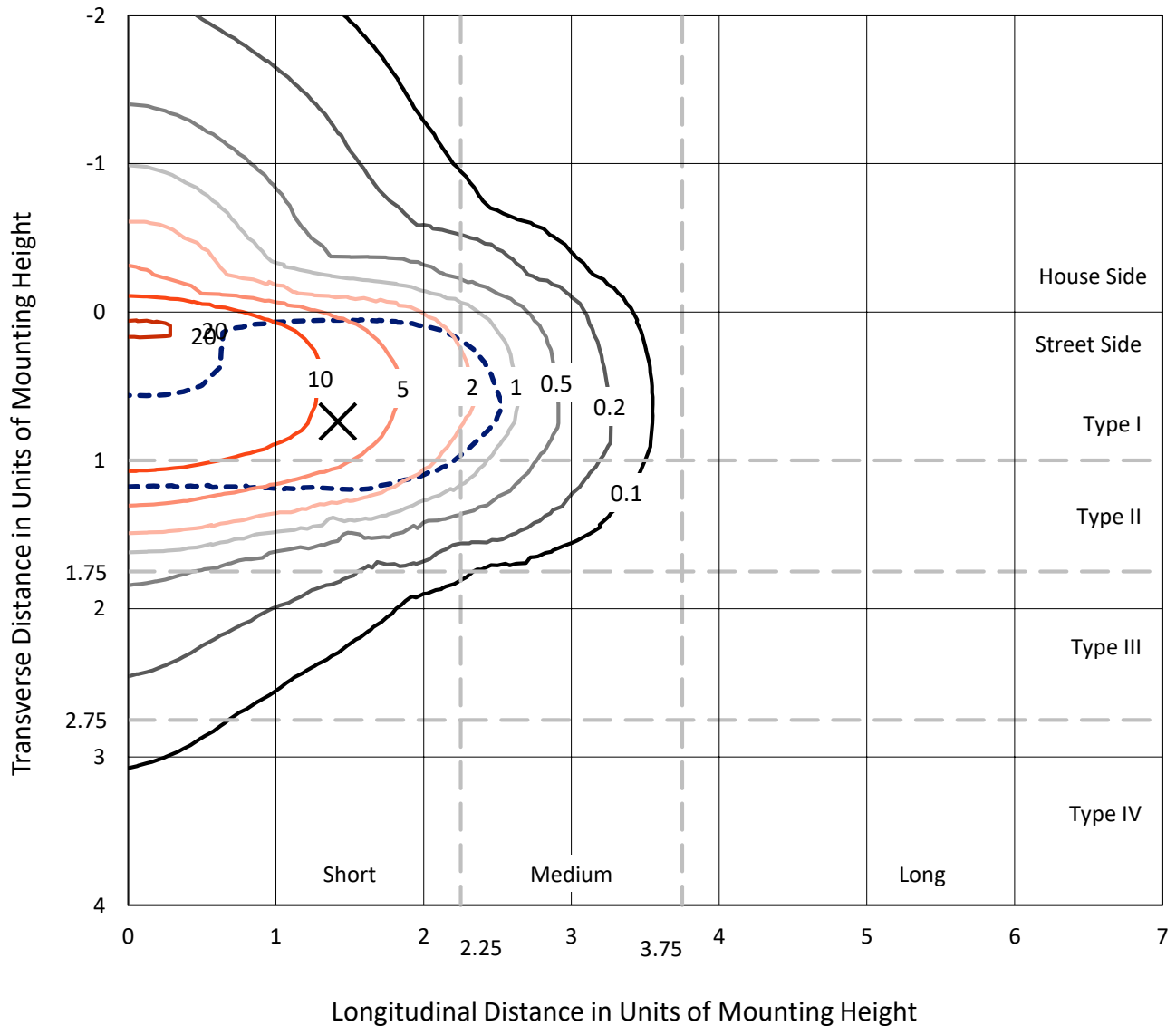
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

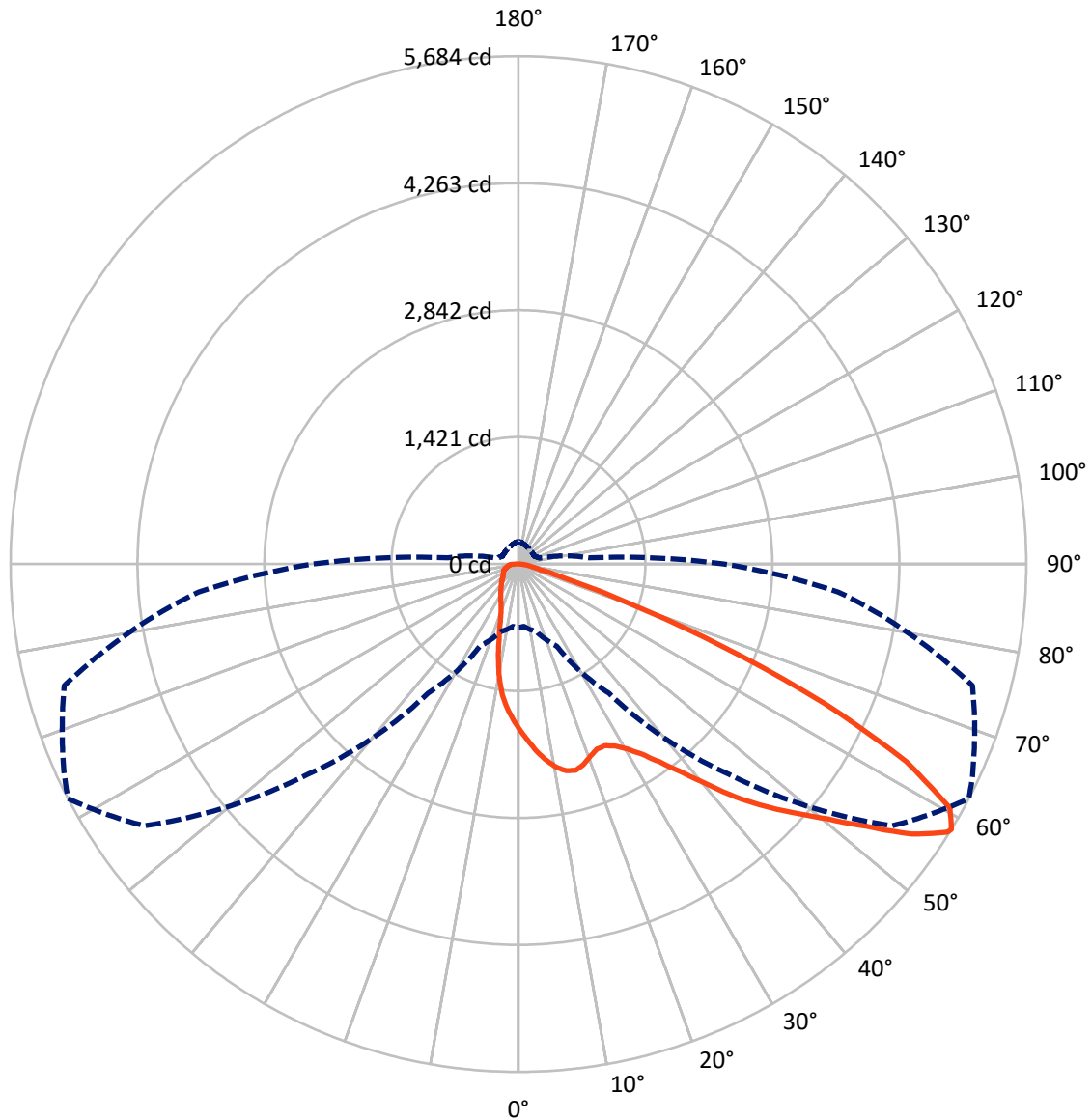
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 21.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1067.5	0.0	1067.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	5885.4	0.0	5885.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	6953.0	0.0	6953.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	2.4
10°-20°	418.8	6.0
20°-30°	678.7	9.8
30°-40°	1083.5	15.6
40°-50°	1576.1	22.7
50°-60°	1649.2	23.7
60°-70°	1005.4	14.5
70°-80°	281.2	4.0
80°-90°	94.2	1.4
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°	6953.0	100.0
0°-180°	6953.0	100.0

Coefficient of Utilization



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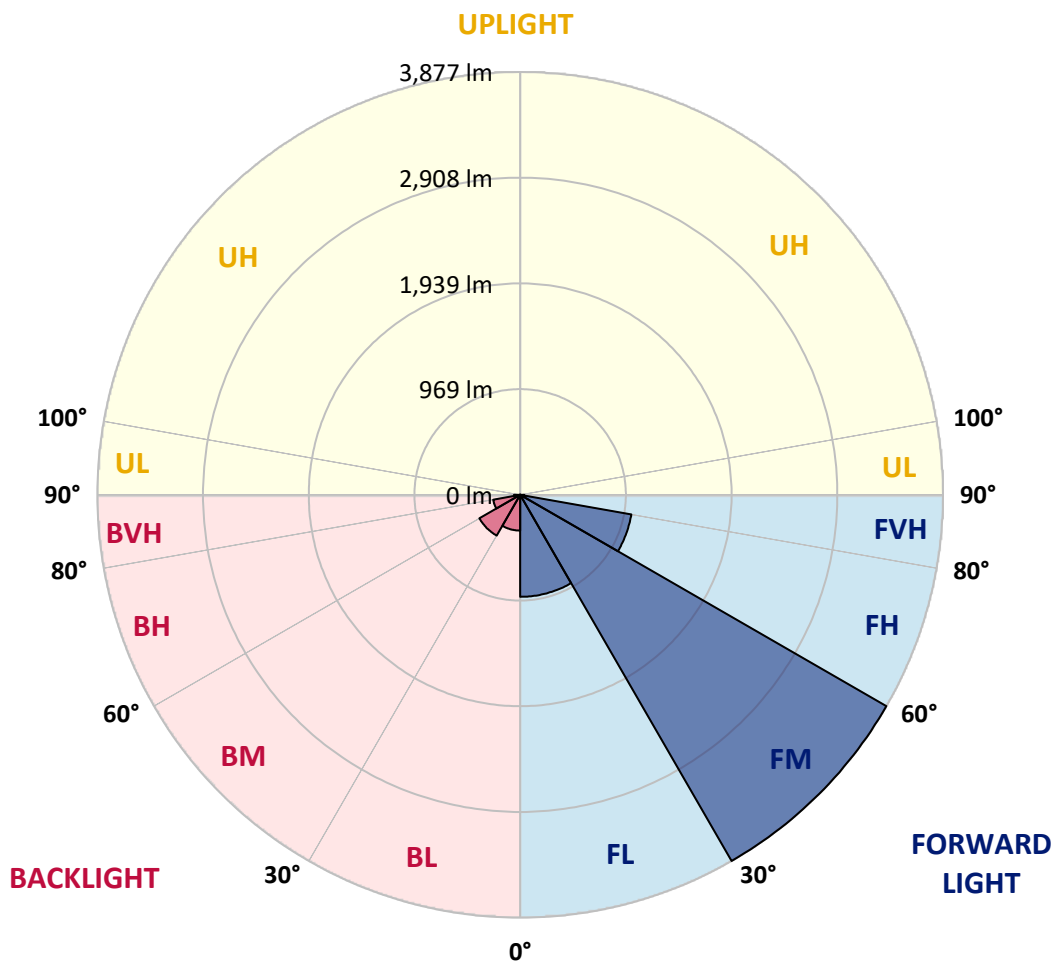
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	935.2	13.5			
FM	(30°-60°)	3877.1	55.8			
FH	(60°-80°)	1035.3	14.9			G1/1800
FVH	(80°-90°)	37.9	0.5			G1/100
BL	(0°-30°)	328.2	4.7	B1/500		
BM	(30°-60°)	431.7	6.2	B1/1000		
BH	(60°-80°)	251.3	3.6	B1/500		G1/500
BVH	(80°-90°)	56.3	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5
2.5°	2107.2	2105.8	2088.0	2076.3	2062.4	2030.3	1998.0	1974.2	1962.0	1915.5	1870.3
5°	2281.4	2276.2	2266.1	2253.6	2235.4	2194.9	2144.1	2100.2	2082.8	2000.3	1917.2
7.5°	2189.3	2197.5	2228.4	2263.2	2299.7	2302.3	2266.1	2214.1	2194.9	2084.6	1962.8
10°	1934.2	1930.7	1969.4	2037.2	2157.5	2276.6	2336.1	2310.5	2290.5	2164.5	2008.5
12.5°	1856.9	1855.9	1862.5	1879.9	1955.5	2118.8	2318.3	2374.0	2367.0	2249.3	2057.2
15°	1880.3	1881.2	1880.7	1882.9	1903.8	1981.6	2218.8	2395.2	2416.9	2333.1	2106.7
17.5°	1955.5	1952.4	1942.9	1932.5	1935.5	1963.3	2111.5	2358.7	2423.9	2407.8	2148.4
20°	2071.5	2071.5	2045.9	2016.7	1997.6	2003.8	2066.8	2296.2	2391.8	2471.2	2179.7
22.5°	2217.0	2219.3	2181.4	2128.5	2085.0	2068.5	2092.3	2249.7	2352.7	2530.0	2207.5
25°	2397.9	2397.4	2342.3	2266.1	2197.5	2158.0	2157.5	2251.8	2340.5	2598.6	2236.7
27.5°	2621.6	2601.3	2536.9	2428.7	2331.8	2271.4	2244.0	2306.5	2366.1	2682.9	2275.8
30°	2874.1	2853.3	2768.9	2629.9	2498.7	2410.5	2365.3	2401.4	2444.3	2790.3	2334.9
32.5°	3124.0	3128.8	3029.7	2872.9	2704.2	2579.9	2513.0	2535.2	2565.2	2921.4	2414.8
35°	3489.9	3489.5	3360.0	3164.0	2963.7	2791.5	2706.8	2718.6	2745.9	3106.6	2526.9
37.5°	3762.8	3758.4	3675.1	3501.7	3276.1	3069.7	2947.1	2948.9	2972.3	3339.1	2674.7
40°	3790.5	3789.7	3789.3	3764.6	3610.3	3415.5	3262.2	3230.5	3240.0	3586.0	2831.5
42.5°	3578.1	3609.8	3701.0	3841.0	3884.0	3782.0	3636.8	3565.9	3545.0	3869.2	2997.6
45°	3275.2	3291.3	3451.2	3765.8	4021.7	4126.1	4017.0	3867.5	3831.9	4144.8	3132.7
47.5°	3134.4	3127.5	3220.0	3562.9	4008.3	4399.8	4407.7	4162.6	4102.1	4382.4	3247.9
50°	2832.4	2823.2	2940.2	3264.3	3861.4	4535.9	4808.8	4484.1	4372.5	4608.4	3352.1
52.5°	2230.5	2221.8	2378.8	2796.3	3532.9	4485.0	5146.9	4878.8	4688.4	4826.2	3449.5
55°	1451.4	1452.3	1601.7	2032.4	2858.9	4188.7	5305.4	5334.6	5121.2	5043.9	3528.2
57.5°	799.1	791.8	898.3	1162.9	1966.8	3515.5	5173.4	5663.1	5551.9	5230.7	3585.0
58°	710.5	701.8	783.9	1012.1	1763.4	3325.6	5106.9	5683.9	5607.0	5261.5	3593.3
60°	506.3	491.5	478.8	570.6	1016.0	2397.9	4663.6	5548.8	5623.1	5323.2	3585.4
62.5°	426.8	409.8	364.6	361.1	478.4	1172.8	3688.0	4873.0	5081.2	5181.1	3459.4
65°	396.3	379.4	319.9	298.5	324.6	506.3	2280.6	3762.8	4040.9	4687.1	3142.2
67.5°	374.6	354.6	290.7	262.9	268.1	302.9	967.7	2460.9	2783.3	3655.0	2520.9
70°	355.1	332.9	267.7	235.5	231.2	230.3	378.1	1284.9	1595.7	2391.8	1688.7
72.5°	332.9	311.2	247.2	213.0	203.4	186.9	227.3	531.0	727.8	1172.4	774.0
75°	300.7	282.8	224.6	194.3	177.7	151.7	167.8	254.6	313.7	448.9	359.4
77.5°	264.6	250.3	201.6	178.6	156.4	123.9	128.2	172.5	193.8	252.9	208.2
80°	187.3	192.5	175.9	157.3	137.8	99.9	98.6	126.4	139.0	169.9	139.9
82.5°	129.1	133.0	143.4	124.3	111.2	77.7	72.5	87.8	94.3	102.6	67.8
85°	92.2	89.5	99.5	89.1	81.7	49.5	46.5	55.6	59.5	62.6	32.6
87.5°	56.1	55.6	57.4	46.0	42.6	25.2	23.0	26.5	28.2	27.4	15.7
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°	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5	1856.5
2.5°	1853.4	1832.1	1785.6	1748.2	1707.8	1676.9	1646.1	1628.7	1609.6	1598.7	1597.4
5°	1873.7	1830.4	1731.2	1639.2	1544.3	1459.2	1375.8	1314.1	1263.7	1235.0	1233.3
7.5°	1896.3	1828.1	1675.2	1515.7	1347.1	1179.4	1031.2	926.5	859.1	827.8	825.6
10°	1913.7	1819.0	1607.0	1358.9	1091.6	870.0	735.3	673.5	653.2	647.9	647.0
12.5°	1934.6	1812.5	1520.9	1157.7	834.3	662.3	621.4	617.5	621.9	624.4	624.9
15°	1954.1	1799.9	1404.9	934.7	653.2	591.9	592.7	601.0	609.7	613.6	614.0
17.5°	1963.3	1769.1	1252.4	736.5	571.4	560.2	570.1	581.0	588.8	591.9	591.9
20°	1963.3	1719.5	1075.5	596.7	528.9	531.0	543.2	551.5	553.2	550.6	549.2
22.5°	1955.1	1658.2	903.5	520.6	494.1	502.4	511.9	506.3	485.8	470.1	467.2
25°	1947.7	1585.7	737.9	474.1	463.7	474.5	470.7	432.0	400.7	384.5	382.0
27.5°	1935.5	1497.9	599.7	435.9	434.1	442.8	404.2	366.7	351.1	342.4	340.6
30°	1932.5	1402.8	501.9	401.9	405.0	392.8	348.5	336.3	332.9	328.1	325.9
32.5°	1942.5	1307.5	440.6	374.2	377.2	337.2	320.3	322.0	321.6	315.5	313.3
35°	1969.8	1215.0	401.5	348.9	340.2	302.0	304.2	309.4	309.4	302.0	299.4
37.5°	2017.7	1128.9	376.8	327.7	297.7	283.8	289.4	296.3	296.3	291.1	289.0
40°	2068.5	1045.0	358.0	310.7	270.8	271.2	276.8	282.0	284.2	285.1	283.4
42.5°	2114.5	958.2	338.1	292.5	258.6	261.6	264.2	268.1	277.2	283.4	282.4
45°	2141.4	870.8	316.4	269.9	250.3	251.6	250.7	257.7	268.5	277.6	277.6
47.5°	2166.2	799.1	298.5	247.2	242.0	242.0	239.5	246.4	256.4	267.3	268.1
50°	2189.7	752.7	285.9	229.9	231.6	230.3	229.4	236.0	249.4	262.5	264.6
52.5°	2213.6	737.0	274.7	217.3	220.8	219.0	219.8	229.0	244.2	257.7	259.8
55°	2247.1	747.0	262.9	208.6	210.3	209.9	213.4	223.8	237.2	250.7	251.6
57.5°	2288.3	783.5	252.9	202.0	200.3	203.0	208.6	218.6	231.6	247.7	249.0
58°	2296.6	792.2	251.1	200.3	198.1	202.0	207.8	217.3	230.8	247.7	249.0
60°	2309.2	823.1	246.8	196.8	190.8	197.7	204.7	214.2	229.0	249.9	252.5
62.5°	2248.3	829.1	245.5	192.9	182.9	191.6	199.9	210.7	227.3	257.3	262.9
65°	2037.6	766.6	236.4	186.4	176.5	186.9	195.6	208.2	232.5	279.4	282.0
67.5°	1635.7	636.6	214.2	176.5	169.0	181.2	192.1	208.2	234.7	282.8	284.6
70°	1124.6	478.4	186.4	165.5	160.4	174.2	190.8	213.0	227.3	267.7	262.5
72.5°	587.5	332.9	163.4	152.9	150.0	168.2	203.4	208.2	218.6	249.9	244.7
75°	295.9	226.4	143.8	138.6	138.2	166.0	227.7	200.3	209.5	235.1	246.4
77.5°	174.7	177.3	128.2	125.1	127.4	162.1	228.1	192.5	199.1	216.5	228.5
80°	119.5	146.5	116.0	115.2	116.9	149.0	210.3	182.9	186.9	204.7	217.7
82.5°	67.3	80.8	101.7	107.3	106.5	122.1	181.7	166.4	171.2	242.0	255.9
85°	32.6	48.7	85.2	100.4	90.8	81.2	147.7	147.7	149.0	173.4	175.5
87.5°	12.2	21.7	57.4	79.5	63.4	48.7	100.4	104.8	116.4	119.9	122.5
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)