

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: P271294

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271294
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: XNV2-AF-02-LED-U-AFL-7027-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7072.5 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' 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

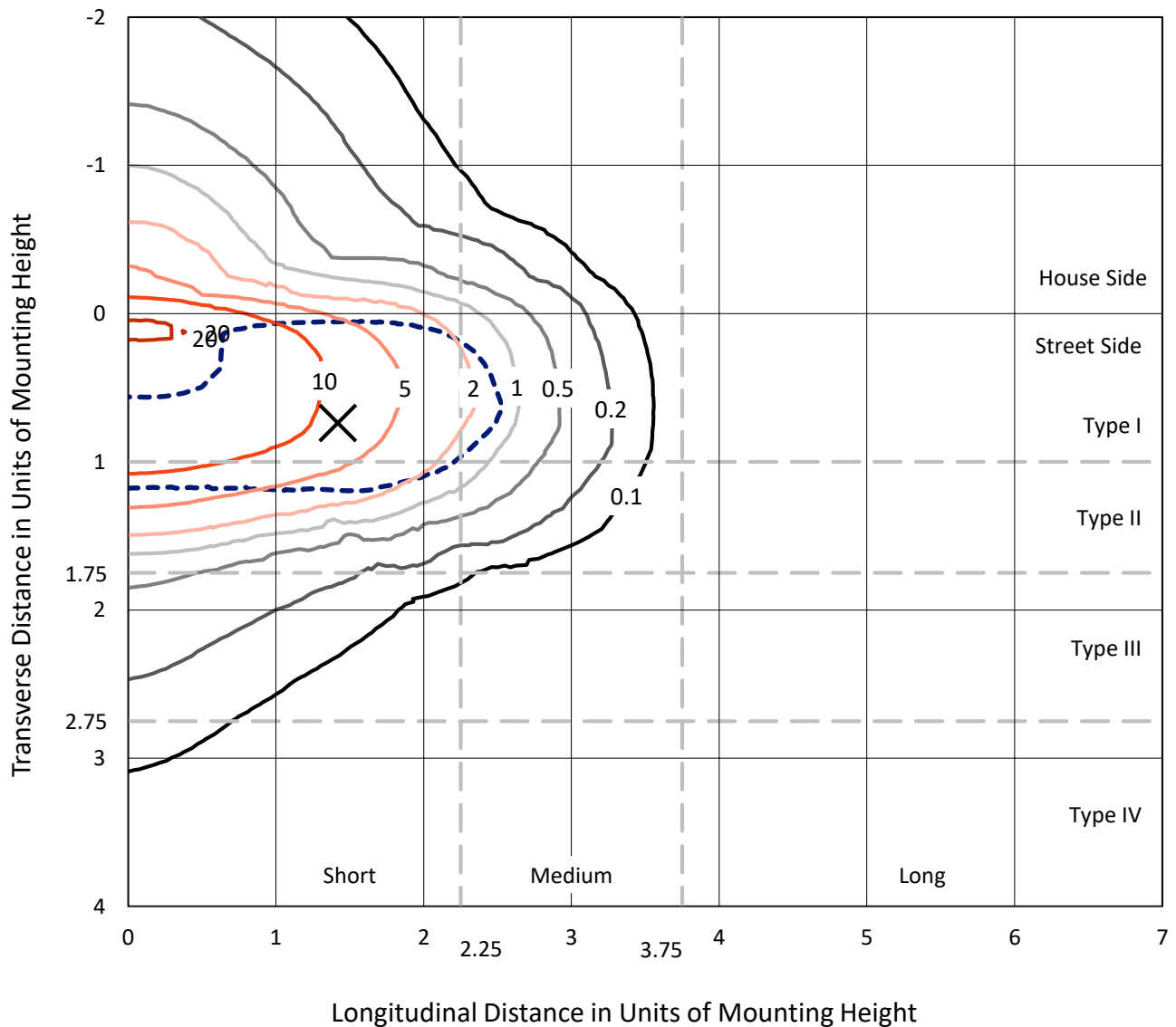


REPORT NUMBER: P271294

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-600

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

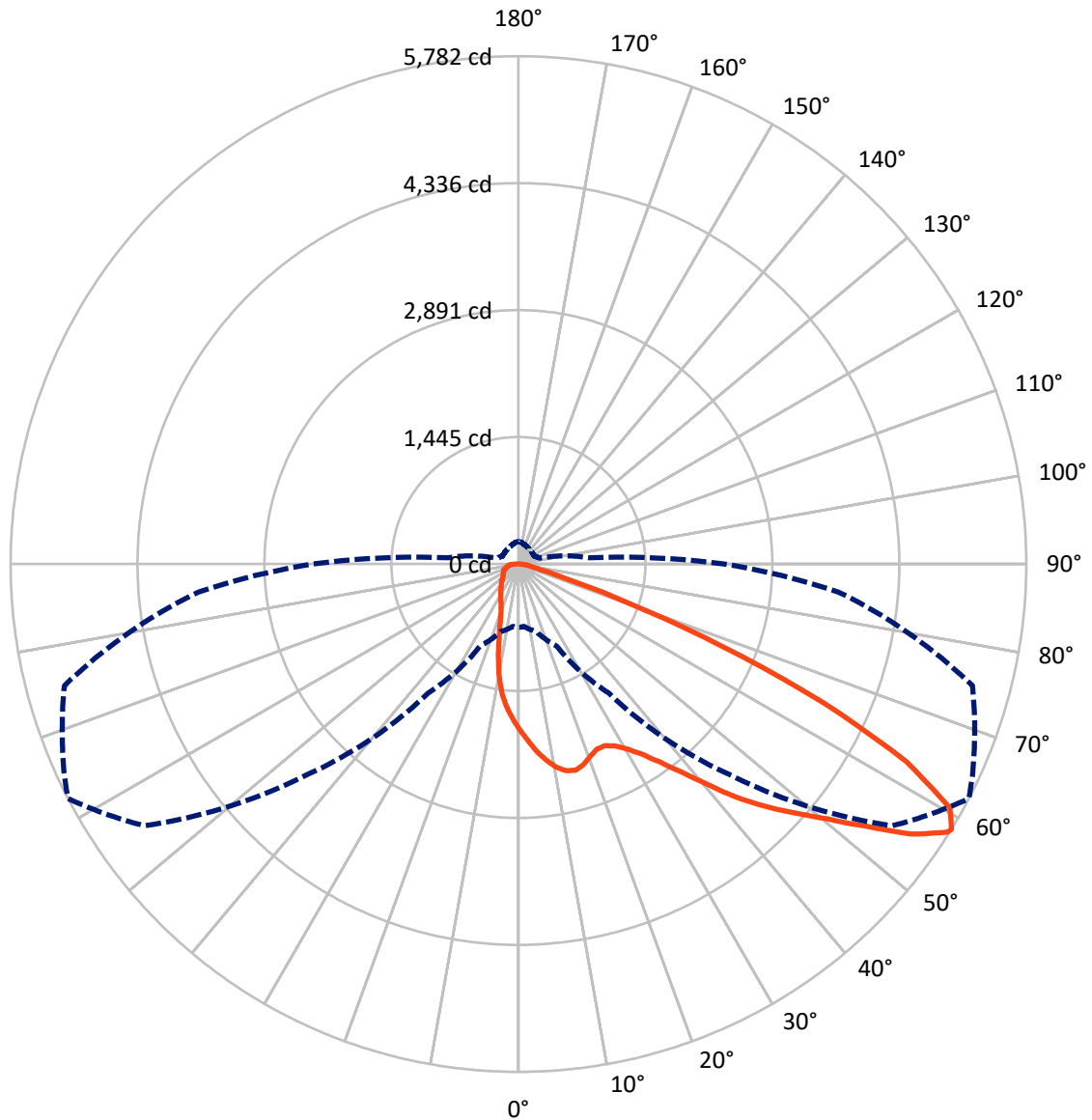


Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P271294

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-600

Luminous Intensity Polar Plot



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

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CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1085.8	0.0	1085.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	5986.6	0.0	5986.6
	% Fixture	84.6	0.0	84.6
Total	Lumens	7072.5	0.0	7072.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	2.4
10°-20°	426.0	6.0
20°-30°	690.3	9.8
30°-40°	1102.2	15.6
40°-50°	1603.2	22.7
50°-60°	1677.6	23.7
60°-70°	1022.7	14.5
70°-80°	286.0	4.0
80°-90°	95.8	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°	7072.5	100.0
0°-180°	7072.5	100.0

Coefficient of Utilization



REPORT NUMBER: P271294

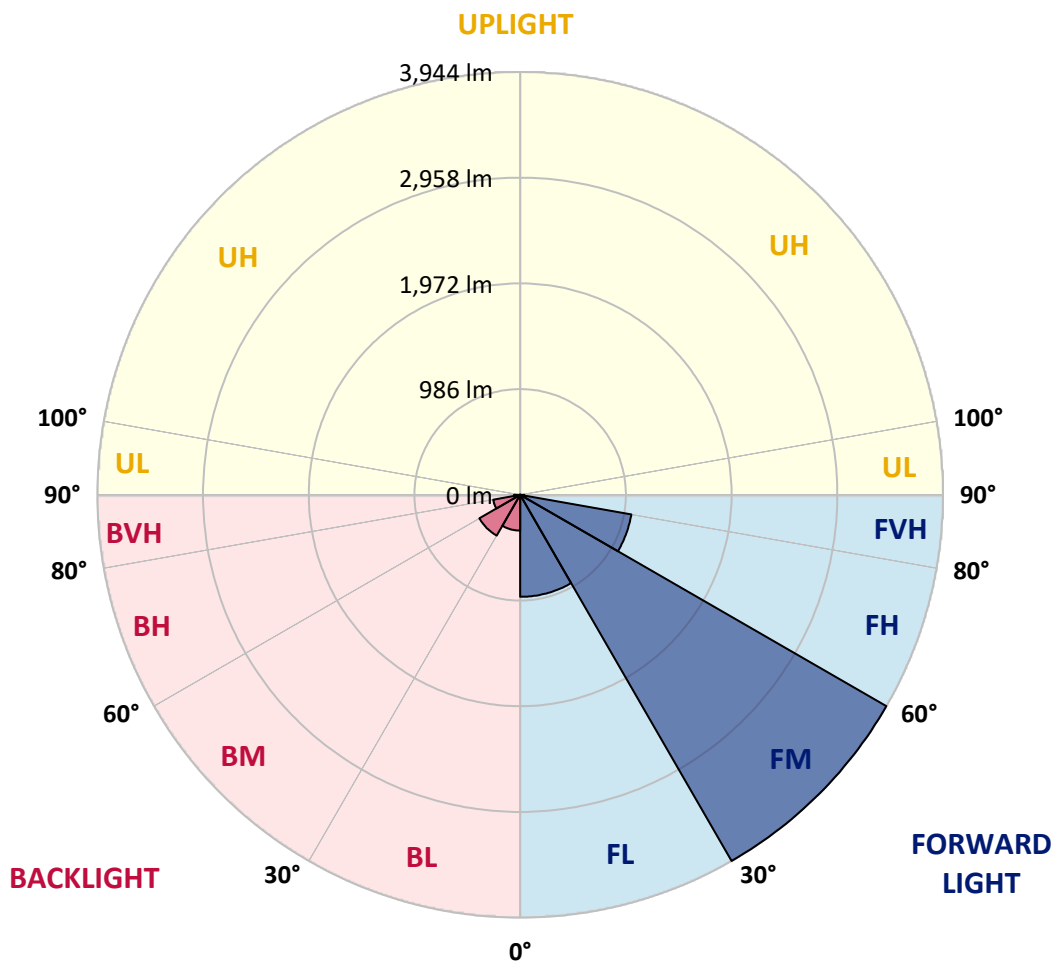
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	951.3	13.5			
FM	(30°-60°)	3943.7	55.8			
FH	(60°-80°)	1053.1	14.9			G1/1800
FVH	(80°-90°)	38.6	0.5			G1/100
BL	(0°-30°)	333.8	4.7	B1/500		
BM	(30°-60°)	439.1	6.2	B1/1000		
BH	(60°-80°)	255.6	3.6	B1/500		G1/500
BVH	(80°-90°)	57.3	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





REPORT NUMBER: P271294

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3
2.5°	2143.4	2142.1	2124.0	2111.9	2097.8	2065.2	2032.4	2008.2	1995.8	1948.5	1902.5
5°	2320.6	2315.3	2305.1	2292.4	2273.8	2232.6	2180.9	2136.3	2118.7	2034.7	1950.2
7.5°	2226.9	2235.3	2266.8	2302.0	2339.1	2341.8	2305.1	2252.1	2232.6	2120.4	1996.7
10°	1967.5	1964.0	2003.2	2072.2	2194.6	2315.8	2376.3	2350.2	2329.9	2201.7	2043.0
12.5°	1888.7	1887.9	1894.5	1912.2	1989.0	2155.4	2358.2	2414.7	2407.6	2288.0	2092.5
15°	1912.6	1913.5	1913.1	1915.2	1936.4	2015.6	2257.0	2436.5	2458.5	2373.2	2142.9
17.5°	1989.0	1986.1	1976.4	1965.8	1968.7	1997.0	2147.8	2399.4	2465.6	2449.3	2185.3
20°	2107.2	2107.2	2081.1	2051.4	2032.0	2038.2	2102.3	2335.7	2432.9	2513.7	2217.1
22.5°	2255.3	2257.4	2219.0	2165.1	2120.8	2104.0	2128.4	2288.3	2393.2	2573.5	2245.5
25°	2439.1	2438.7	2382.6	2305.1	2235.3	2195.1	2194.6	2290.6	2380.8	2643.4	2275.0
27.5°	2666.7	2646.0	2580.6	2470.5	2372.0	2310.5	2282.7	2346.3	2406.7	2729.1	2314.9
30°	2923.5	2902.3	2816.5	2675.2	2541.7	2452.0	2405.9	2442.6	2486.4	2838.3	2374.9
32.5°	3177.8	3182.5	3081.7	2922.2	2750.7	2624.3	2556.2	2578.8	2609.2	2971.8	2456.3
35°	3549.9	3549.5	3417.7	3218.4	3014.6	2839.5	2753.3	2765.3	2793.1	3160.1	2570.4
37.5°	3827.5	3823.0	3738.1	3561.8	3332.4	3122.5	2997.9	2999.6	3023.4	3396.5	2720.6
40°	3855.7	3854.8	3854.4	3829.3	3672.4	3474.4	3318.2	3286.0	3295.7	3647.6	2880.2
42.5°	3639.7	3671.9	3764.6	3907.1	3950.8	3846.9	3699.3	3627.3	3606.1	3935.7	3049.0
45°	3331.5	3348.0	3510.5	3830.6	4090.9	4197.1	4086.1	3933.9	3897.7	4216.0	3186.6
47.5°	3188.4	3181.3	3275.4	3624.1	4077.2	4475.4	4483.4	4234.2	4172.6	4457.7	3303.6
50°	2881.1	2871.8	2990.7	3320.4	3927.7	4613.9	4891.5	4561.2	4447.7	4687.6	3409.7
52.5°	2268.8	2260.0	2419.7	2844.5	3593.7	4562.1	5235.3	4962.5	4769.0	4909.1	3508.8
55°	1476.4	1477.3	1629.3	2067.4	2908.1	4260.8	5396.7	5426.3	5209.2	5130.6	3588.8
57.5°	812.8	805.4	913.7	1182.9	2000.5	3576.0	5262.4	5760.4	5647.3	5320.7	3646.7
58°	722.6	713.9	797.4	1029.5	1793.7	3382.7	5194.7	5781.8	5703.3	5352.0	3655.2
60°	515.0	499.9	487.2	580.3	1033.5	2439.1	4743.8	5644.2	5719.8	5414.9	3647.2
62.5°	434.2	416.9	370.9	367.3	486.7	1192.9	3751.4	4956.8	5168.6	5270.3	3518.9
65°	403.1	385.9	325.4	303.6	330.1	515.0	2319.8	3827.5	4110.4	4767.7	3196.3
67.5°	381.1	360.7	295.7	267.4	272.7	308.1	984.5	2503.1	2831.2	3717.8	2564.2
70°	361.1	338.7	272.2	239.6	235.1	234.3	384.6	1307.0	1623.1	2432.9	1717.6
72.5°	338.7	316.6	251.5	216.6	206.9	190.1	231.1	540.2	740.5	1192.6	787.3
75°	306.0	287.7	228.4	197.5	180.7	154.2	170.6	259.0	319.2	456.6	365.6
77.5°	269.2	254.6	205.2	181.6	159.1	126.0	130.4	175.4	197.2	257.3	211.7
80°	190.5	195.8	179.0	160.0	140.1	101.7	100.3	128.6	141.5	172.8	142.3
82.5°	131.3	135.3	145.9	126.4	113.1	79.1	73.8	89.3	95.8	104.4	69.0
85°	93.8	91.1	101.1	90.5	83.2	50.3	47.3	56.6	60.5	63.7	33.1
87.5°	57.0	56.6	58.3	46.8	43.3	25.6	23.4	26.9	28.7	27.8	15.9
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: P271294

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3	1888.3
2.5°	1885.3	1863.5	1816.3	1778.3	1737.1	1705.8	1674.4	1656.7	1637.3	1626.2	1624.9
5°	1906.1	1861.7	1760.9	1667.3	1571.0	1484.3	1399.5	1336.7	1285.5	1256.2	1254.5
7.5°	1929.0	1859.6	1704.1	1541.9	1370.3	1199.6	1049.0	942.4	874.0	842.0	839.8
10°	1946.6	1850.2	1634.6	1382.2	1110.3	884.9	747.8	685.1	664.3	659.0	658.2
12.5°	1967.8	1843.7	1547.2	1177.6	848.7	673.6	632.0	628.2	632.5	635.2	635.6
15°	1987.8	1830.8	1429.1	950.8	664.3	602.0	602.9	611.3	620.2	624.1	624.6
17.5°	1997.0	1799.5	1273.8	749.2	581.3	569.7	579.9	590.9	598.9	602.0	602.0
20°	1997.0	1749.1	1094.0	606.9	537.9	540.2	552.5	560.9	562.7	560.1	558.7
22.5°	1988.7	1686.7	919.0	529.6	502.6	511.0	520.7	515.0	494.2	478.3	475.2
25°	1981.1	1612.9	750.5	482.2	471.6	482.7	478.6	439.5	407.6	391.2	388.5
27.5°	1968.7	1523.6	609.9	443.4	441.5	450.4	411.1	373.1	357.2	348.4	346.6
30°	1965.8	1426.9	510.5	408.9	412.0	399.6	354.6	342.2	338.7	333.7	331.6
32.5°	1975.8	1330.0	448.3	380.6	383.7	343.1	325.7	327.5	327.2	321.0	318.7
35°	2003.7	1235.9	408.4	354.9	346.0	307.2	309.5	314.8	314.8	307.2	304.5
37.5°	2052.3	1148.4	383.2	333.4	302.8	288.6	294.4	301.4	301.4	296.1	293.9
40°	2104.0	1063.1	364.3	316.1	275.4	275.8	281.6	286.9	289.1	290.0	288.1
42.5°	2150.9	974.8	344.0	297.5	263.1	266.1	268.8	272.7	282.0	288.1	287.3
45°	2178.3	885.8	321.9	274.5	254.6	255.9	255.1	262.1	273.2	282.4	282.4
47.5°	2203.5	812.8	303.6	251.5	246.2	246.2	243.6	250.6	260.8	271.8	272.7
50°	2227.3	765.5	290.8	233.7	235.5	234.3	233.4	239.9	253.7	266.9	269.2
52.5°	2251.7	749.6	279.4	221.1	224.5	222.8	223.7	232.9	248.4	262.1	264.3
55°	2285.6	759.8	267.4	212.2	213.9	213.4	217.0	227.6	241.4	255.1	255.9
57.5°	2327.7	796.9	257.3	205.5	203.7	206.4	212.2	222.3	235.5	252.0	253.3
58°	2336.1	805.8	255.5	203.7	201.6	205.5	211.3	221.1	234.6	252.0	253.3
60°	2348.9	837.2	251.0	200.2	194.0	201.1	208.1	217.8	232.9	254.2	256.8
62.5°	2287.1	843.4	249.8	196.3	186.0	194.9	203.3	214.3	231.1	261.6	267.4
65°	2072.7	779.6	240.4	189.6	179.4	190.1	199.0	211.7	236.4	284.3	286.9
67.5°	1663.8	647.6	217.8	179.4	171.9	184.3	195.4	211.7	238.7	287.7	289.6
70°	1143.9	486.7	189.6	168.4	163.1	177.2	194.0	216.6	231.1	272.2	266.9
72.5°	597.6	338.7	166.1	155.5	152.5	171.0	206.9	211.7	222.3	254.2	248.9
75°	301.0	230.2	146.3	141.0	140.6	168.8	231.7	203.7	213.1	239.0	250.6
77.5°	177.7	180.3	130.4	127.3	129.5	164.8	232.0	195.8	202.5	220.2	232.5
80°	121.6	148.9	117.9	117.0	118.8	151.6	213.9	186.0	190.1	208.1	221.4
82.5°	68.5	82.3	103.5	109.1	108.2	124.2	184.8	169.3	174.1	246.2	260.4
85°	33.1	49.4	86.6	102.0	92.3	82.6	150.2	150.2	151.6	176.3	178.6
87.5°	12.3	22.1	58.3	80.8	64.6	49.4	102.0	106.4	118.4	122.0	124.7
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)