

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: P198703

Luminaire Tested: **XNV2-AF-02-LED-U-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198703
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)
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-SL2
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12093.3 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G3

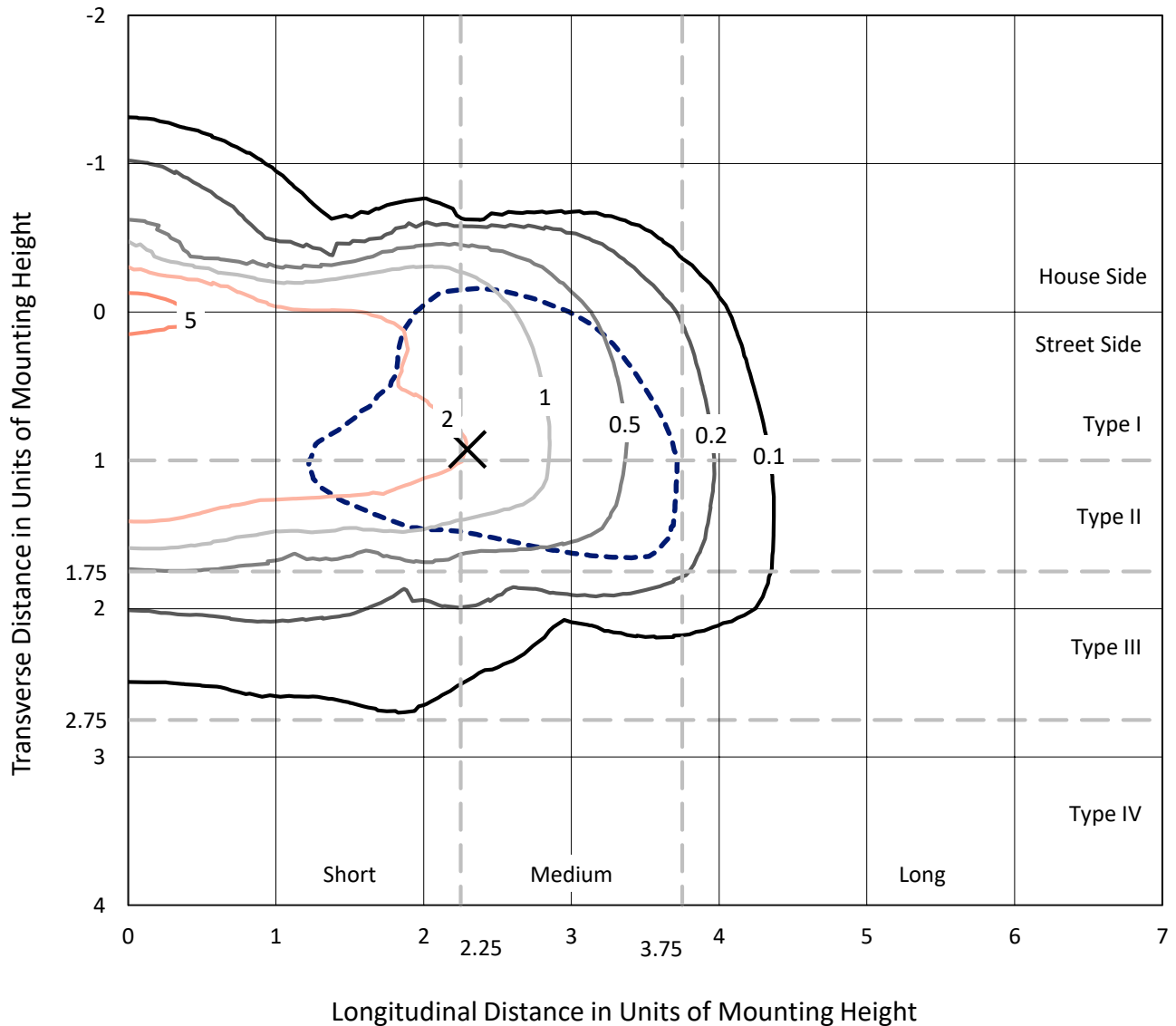
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198703
 CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

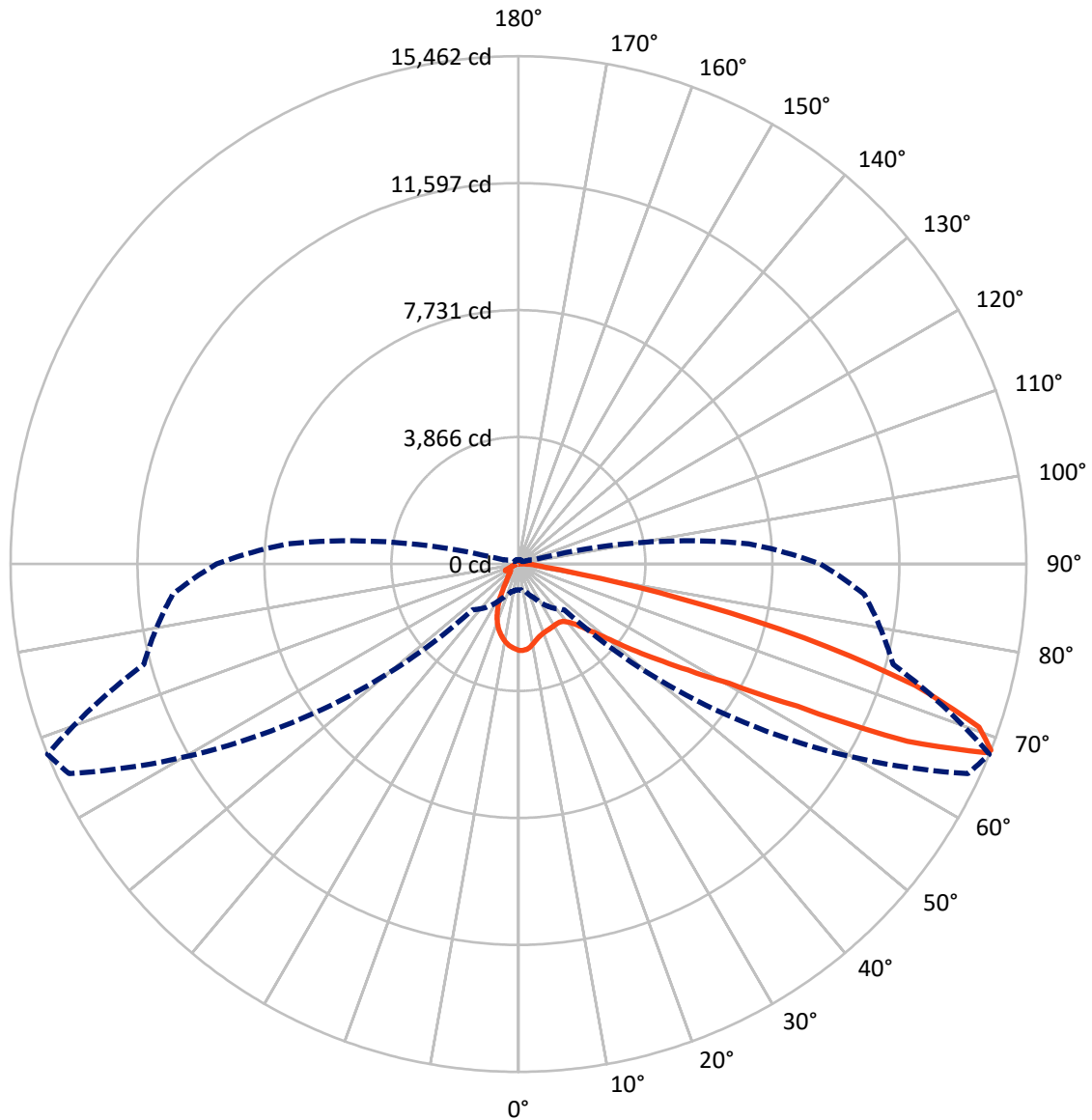


Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P198703

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P198703

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1978.5	0.0	1978.5
	% Fixture	16.4	0.0	16.4
Street Side	Lumens	10114.8	0.0	10114.8
	% Fixture	83.6	0.0	83.6
Total	Lumens	12093.3	0.0	12093.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.5	1.9
10°-20°	522.9	4.3
20°-30°	707.3	5.8
30°-40°	997.2	8.2
40°-50°	1639.8	13.6
50°-60°	2541.8	21.0
60°-70°	3295.6	27.3
70°-80°	1891.2	15.6
80°-90°	272.1	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°	12093.3	100.0
0°-180°	12093.3	100.0

Coefficient of Utilization



REPORT NUMBER: P198703

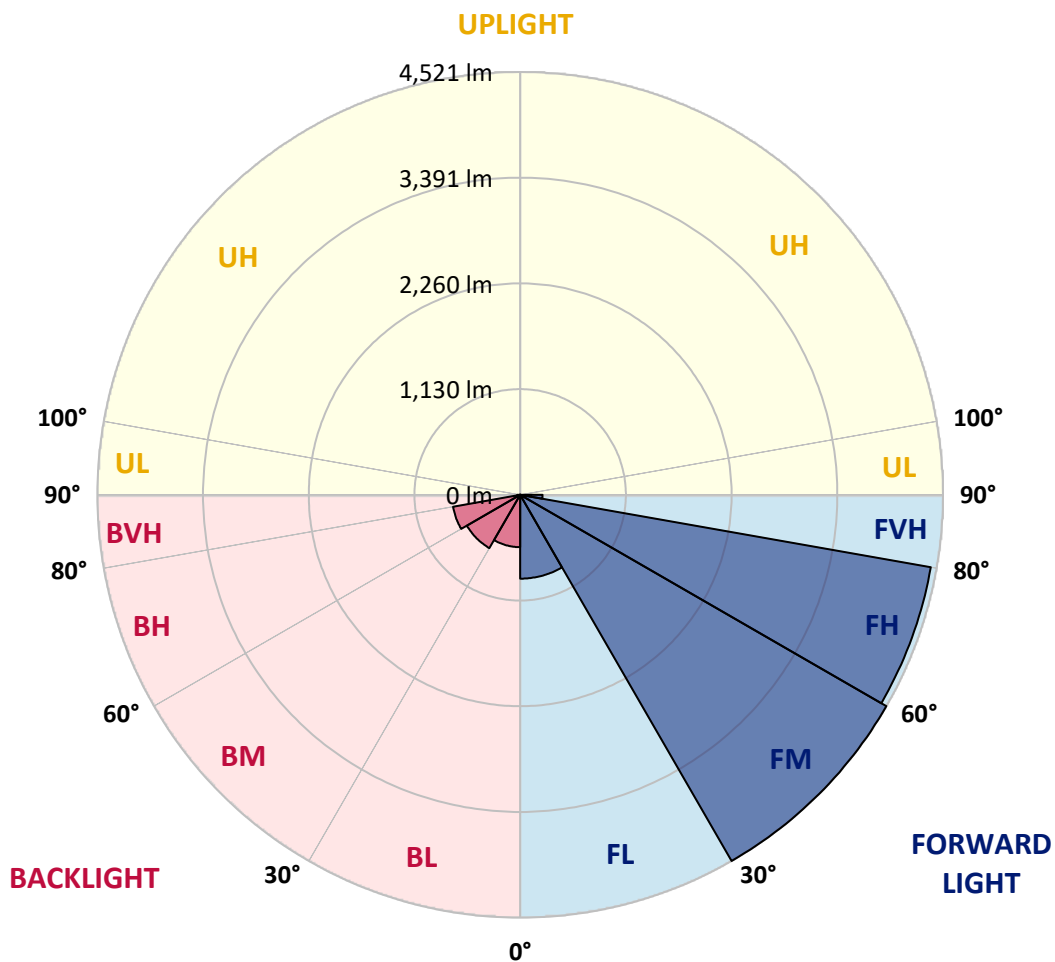
CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	896.3	7.4			
FM (30°-60°)	4520.7	37.4			
FH (60°-80°)	4458.1	36.9			G2/5000
FVH (80°-90°)	239.7	2.0			G3/500
BL (0°-30°)	559.3	4.6	B2/1000		
BM (30°-60°)	658.1	5.4	B1/1000		
BH (60°-80°)	728.7	6.0	B2/1000		G2/1000
BVH (80°-90°)	32.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





REPORT NUMBER: P198703

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4
2.5°	2561.1	2581.6	2581.6	2596.7	2610.1	2621.1	2630.6	2630.6	2630.6	2624.3	2618.8
5°	2291.7	2319.3	2323.3	2361.3	2411.0	2471.9	2539.8	2599.8	2599.8	2633.8	2642.5
7.5°	2104.5	2113.2	2128.1	2154.2	2204.8	2279.9	2386.5	2520.8	2553.2	2622.7	2659.1
10°	1971.7	1978.9	1991.5	2017.6	2063.4	2131.3	2236.4	2411.0	2464.7	2588.0	2659.9
12.5°	1874.6	1880.2	1891.9	1915.7	1962.3	2023.1	2130.6	2312.3	2378.6	2553.2	2670.9
15°	1798.8	1808.3	1817.7	1840.6	1888.1	1946.5	2055.5	2240.4	2312.3	2525.6	2691.5
17.5°	1768.8	1773.5	1775.0	1786.9	1829.5	1888.8	1997.8	2189.8	2264.1	2503.5	2707.2
20°	1787.7	1788.5	1772.7	1764.8	1789.2	1843.8	1949.6	2151.9	2227.7	2483.7	2713.6
22.5°	1870.7	1870.7	1829.5	1794.8	1778.2	1812.2	1917.2	2125.8	2207.9	2468.7	2713.6
25°	2028.6	2021.6	1957.5	1888.8	1815.3	1801.1	1896.8	2109.2	2193.0	2460.8	2703.2
27.5°	2236.4	2230.1	2148.7	2046.8	1914.1	1824.8	1889.6	2095.8	2178.0	2448.9	2681.2
30°	2489.2	2483.7	2391.2	2257.8	2061.9	1899.9	1906.2	2086.3	2166.1	2429.2	2644.0
32.5°	2741.2	2738.0	2664.6	2527.9	2265.6	2027.1	1949.6	2084.8	2159.8	2405.5	2599.0
35°	2994.8	2994.8	2949.8	2834.4	2539.8	2218.3	2040.5	2113.9	2171.6	2392.8	2560.3
37.5°	3369.2	3354.3	3270.5	3151.2	2885.0	2466.3	2187.5	2175.6	2217.5	2414.2	2547.7
40°	3949.1	3905.6	3696.3	3495.6	3261.8	2783.9	2402.3	2294.9	2320.2	2486.8	2577.6
42.5°	4555.8	4487.1	4209.7	3889.1	3651.2	3175.6	2684.3	2488.4	2487.6	2627.4	2673.3
45°	5076.4	5040.8	4740.7	4333.8	4096.0	3616.5	3040.6	2776.0	2747.5	2845.4	2857.3
47.5°	5378.9	5355.2	5174.3	4804.6	4623.7	4137.1	3492.5	3174.9	3121.2	3179.6	3161.4
50°	5295.2	5318.1	5265.9	5077.1	5190.9	4868.6	4068.4	3721.6	3619.6	3678.1	3633.8
52.5°	4854.4	4916.0	4962.6	4999.0	5517.2	5847.4	4792.0	4404.1	4319.6	4309.3	4266.6
55°	4060.5	4158.4	4305.4	4572.4	5429.5	6633.4	6056.0	5229.6	5106.4	5041.6	5058.2
57.5°	2763.3	2911.8	3228.6	3736.5	4973.7	6968.3	7925.0	6296.1	6087.6	5856.9	5910.6
60°	1522.3	1646.3	2023.1	2535.0	3933.2	6918.6	9581.6	8029.2	7372.8	6761.4	6872.0
62.5°	985.1	1012.0	1292.4	1731.7	2414.2	6108.0	10501.9	10926.1	9534.9	7954.3	8109.9
65°	791.6	810.5	948.0	1396.6	1681.8	3929.4	10542.9	13931.2	13014.0	9575.2	9580.0
67.5°	773.4	782.0	861.8	1174.7	1577.6	2139.3	9113.2	15116.1	15328.6	11488.6	10563.5
68°	784.4	794.7	875.3	1138.3	1576.8	1971.7	8422.7	15097.9	15462.1	11808.5	10563.5
70°	692.0	704.6	892.6	1177.8	1509.7	1695.2	5767.6	14296.1	14882.3	12543.9	10023.2
72.5°	361.8	351.6	441.6	929.8	1699.2	1766.3	3047.0	11943.6	12627.7	11617.3	8659.7
75°	282.0	256.8	247.2	367.3	1494.6	1831.9	1769.5	8489.1	9005.6	8374.5	5788.2
77.5°	265.5	234.7	216.5	217.3	658.1	1906.2	1431.4	4995.8	4995.8	3994.9	1846.9
80°	213.3	184.8	173.0	197.5	317.5	1756.9	1493.8	2276.7	1941.8	1032.5	508.7
82.5°	140.7	125.6	126.4	160.4	240.9	1173.1	1730.0	1124.1	844.4	457.4	299.4
85°	89.3	76.6	85.3	112.2	180.1	522.9	1712.6	781.3	559.3	256.8	149.4
87.5°	45.0	34.8	42.7	58.4	109.8	150.1	1410.1	697.6	414.7	106.7	81.3
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: P198703

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4	2631.4
2.5°	2618.8	2601.4	2592.7	2578.4	2561.1	2543.7	2531.9	2526.4	2523.2	2524.7	2523.9
5°	2637.7	2614.8	2577.6	2524.7	2470.2	2412.5	2368.3	2334.4	2313.0	2306.8	2305.1
7.5°	2651.9	2618.8	2549.2	2452.8	2359.6	2258.6	2172.4	2103.7	2057.1	2035.8	2035.0
10°	2649.5	2606.9	2497.1	2354.9	2218.3	2069.7	1934.6	1819.3	1735.5	1695.2	1693.7
12.5°	2651.9	2593.5	2433.1	2240.4	2044.5	1831.9	1631.3	1452.0	1327.2	1267.9	1265.5
15°	2661.4	2579.3	2367.5	2112.4	1841.4	1541.3	1254.4	1029.3	915.5	876.9	876.9
17.5°	2660.6	2555.5	2291.7	1963.9	1600.5	1198.4	856.3	717.3	706.2	741.7	747.3
20°	2644.8	2517.7	2193.7	1787.7	1317.7	829.5	580.6	560.9	649.4	747.3	758.4
22.5°	2620.4	2468.7	2080.8	1583.1	988.3	540.3	448.0	477.9	598.0	719.6	737.0
25°	2586.3	2409.5	1951.3	1345.3	657.2	388.6	373.7	410.8	495.3	576.6	589.3
27.5°	2536.6	2334.4	1809.8	1087.8	419.5	320.0	325.5	351.6	387.9	422.7	429.7
30°	2474.2	2246.7	1655.7	802.6	318.3	286.0	295.4	311.3	327.0	349.1	353.9
32.5°	2411.0	2157.4	1495.5	551.4	278.0	267.8	277.3	286.0	299.4	314.5	317.5
35°	2354.1	2074.4	1330.3	384.7	260.6	255.9	260.6	266.2	279.7	294.6	296.2
37.5°	2313.0	2006.5	1158.1	304.1	250.4	245.7	248.1	250.4	266.2	288.4	290.7
40°	2307.5	1961.5	983.6	273.3	242.5	236.2	234.7	236.2	256.8	282.0	284.4
42.5°	2361.3	1963.9	812.8	260.6	236.2	229.1	222.8	226.0	244.1	263.8	265.5
45°	2488.4	2019.2	665.1	255.1	230.7	225.2	215.6	217.3	226.0	236.2	237.7
47.5°	2712.8	2140.0	552.2	252.0	226.0	221.2	209.3	204.6	205.4	210.9	210.9
50°	3071.4	2342.3	483.4	248.9	222.0	213.3	199.9	190.4	188.0	191.2	192.0
52.5°	3606.2	2689.0	450.3	242.5	214.9	203.1	188.0	178.5	174.6	177.8	177.8
55°	4329.0	3242.9	434.4	233.8	206.2	190.4	177.0	169.1	165.9	168.3	168.3
57.5°	5153.0	3962.5	461.4	222.0	195.1	177.0	167.5	161.9	159.6	161.9	162.8
60°	6131.8	4904.1	646.2	206.9	183.3	165.1	159.6	156.4	154.9	157.2	157.2
62.5°	7432.9	6157.0	1000.1	195.1	170.6	154.1	152.4	150.9	149.4	151.7	151.7
65°	8837.5	7297.0	1029.3	188.0	159.6	144.5	145.4	145.4	143.7	146.2	146.2
67.5°	9284.5	7198.2	575.1	179.3	146.2	135.1	138.2	138.2	137.5	139.8	139.0
68°	9189.8	7041.8	500.8	177.0	143.7	132.7	135.8	136.7	135.8	138.2	137.5
70°	8483.5	6182.3	329.4	163.6	133.5	124.8	129.5	130.3	129.5	132.7	132.0
72.5°	7003.1	4637.1	243.4	143.0	120.9	114.6	119.3	120.1	120.9	124.0	123.3
75°	4447.6	2561.1	192.0	121.6	108.2	102.7	107.4	109.8	111.4	116.1	113.8
77.5°	1218.1	777.3	155.6	103.5	93.2	90.8	94.0	97.2	98.7	104.2	100.4
80°	426.6	343.6	129.5	87.7	77.4	76.6	79.8	83.0	84.5	89.3	84.5
82.5°	259.1	224.3	103.5	68.7	60.9	60.0	64.0	67.1	68.7	68.7	65.6
85°	135.1	118.5	75.8	48.2	41.8	39.5	46.6	50.5	51.4	50.5	48.2
87.5°	75.8	67.1	40.3	22.9	18.9	19.7	24.4	30.0	32.4	31.6	30.0
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)