

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: P198719

Luminaire Tested: **XNV2-AF-02-LED-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)
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-SL3
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12319.4 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

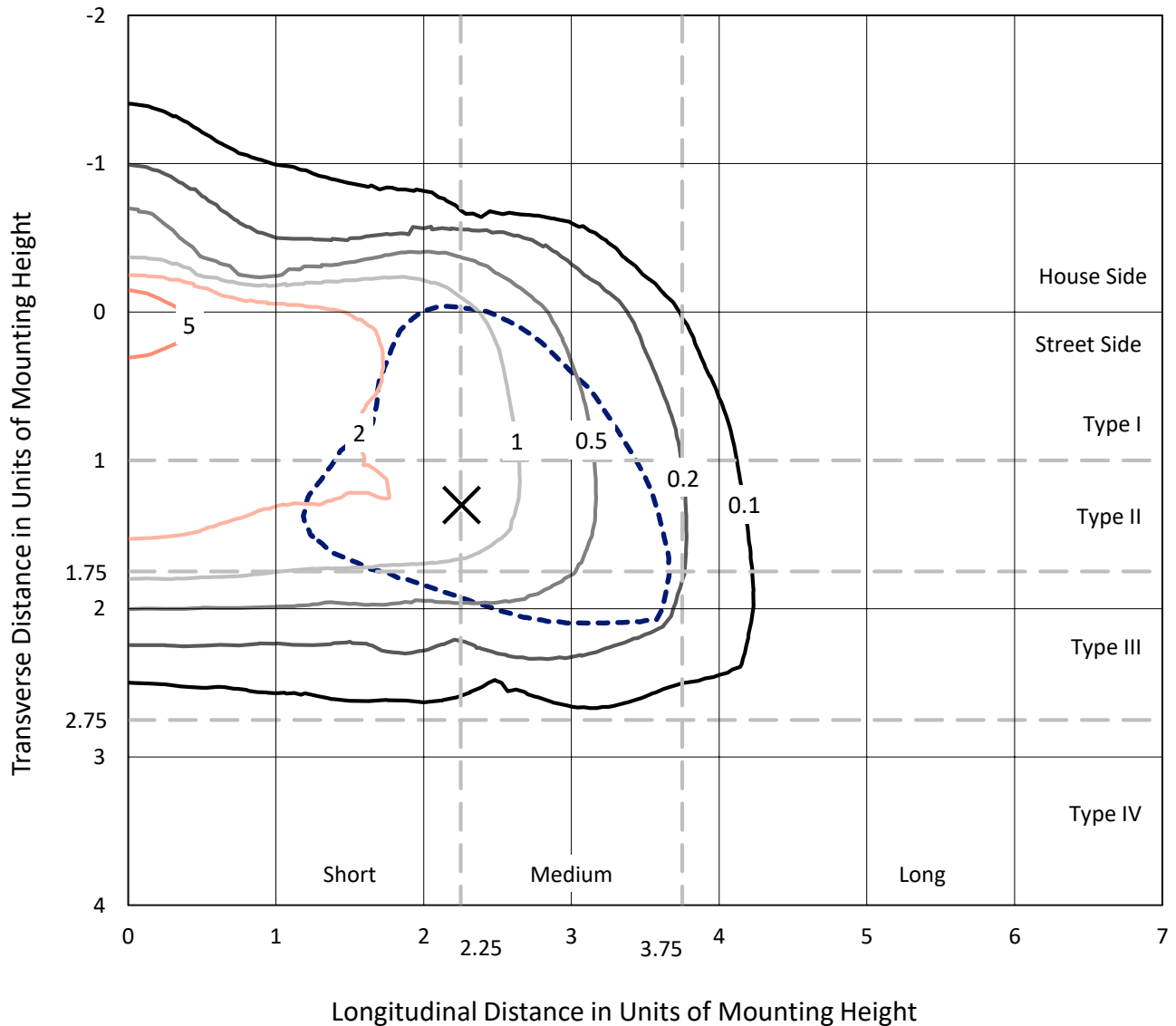
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198719
 CATALOG NUMBER: XNV2-AF-02-LED-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

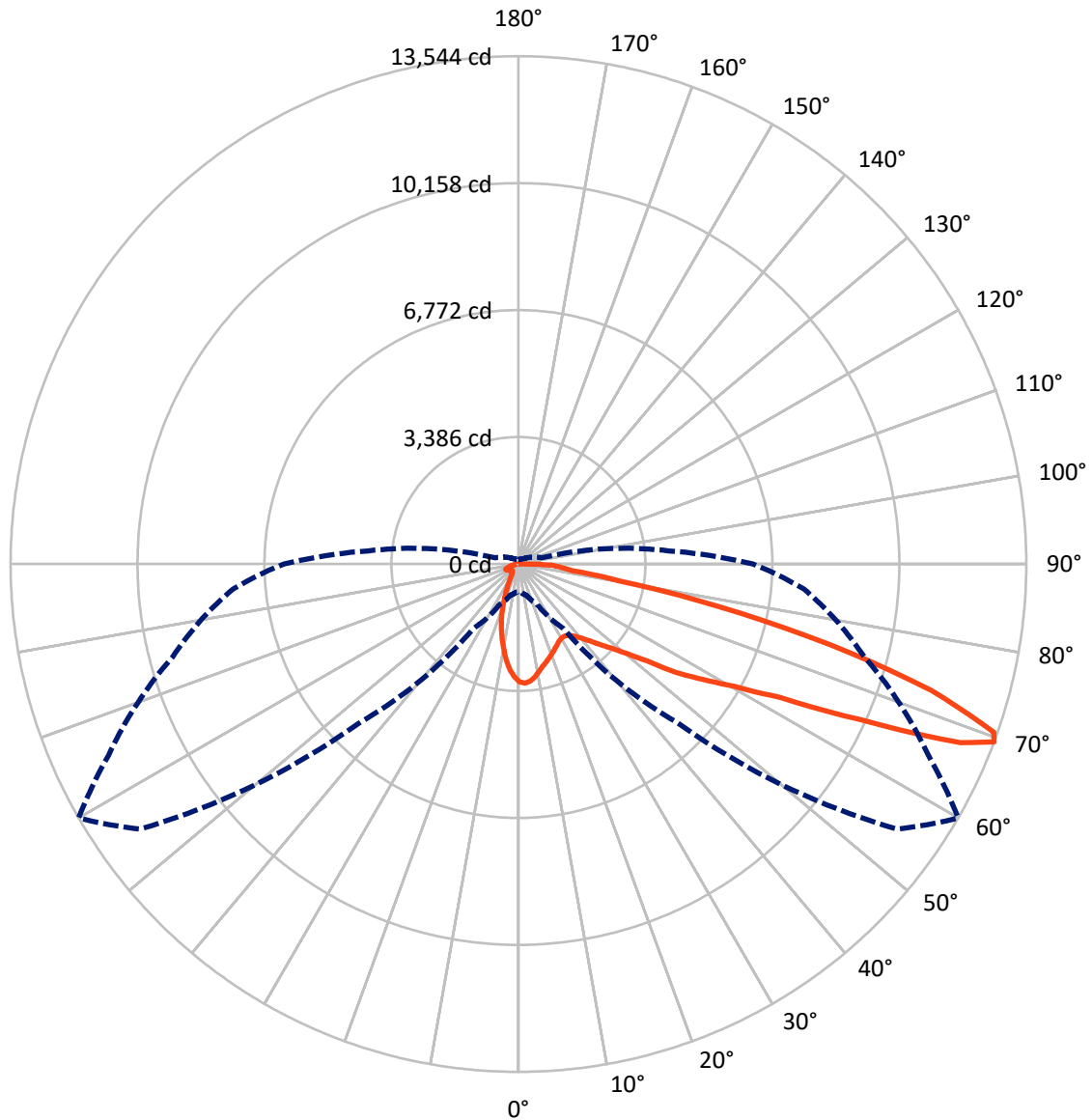


Based on 20 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P198719

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1757.1	0.0	1757.1
	% Fixture	14.3	0.0	14.3
Street Side	Lumens	10562.2	0.0	10562.2
	% Fixture	85.7	0.0	85.7
Total	Lumens	12319.4	0.0	12319.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.7	2.2
10°-20°	571.0	4.6
20°-30°	728.4	5.9
30°-40°	1002.3	8.1
40°-50°	1623.5	13.2
50°-60°	2548.0	20.7
60°-70°	3397.0	27.6
70°-80°	1889.5	15.3
80°-90°	293.1	2.4
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°	12319.4	100.0
0°-180°	12319.4	100.0

Coefficient of Utilization



REPORT NUMBER: P198719

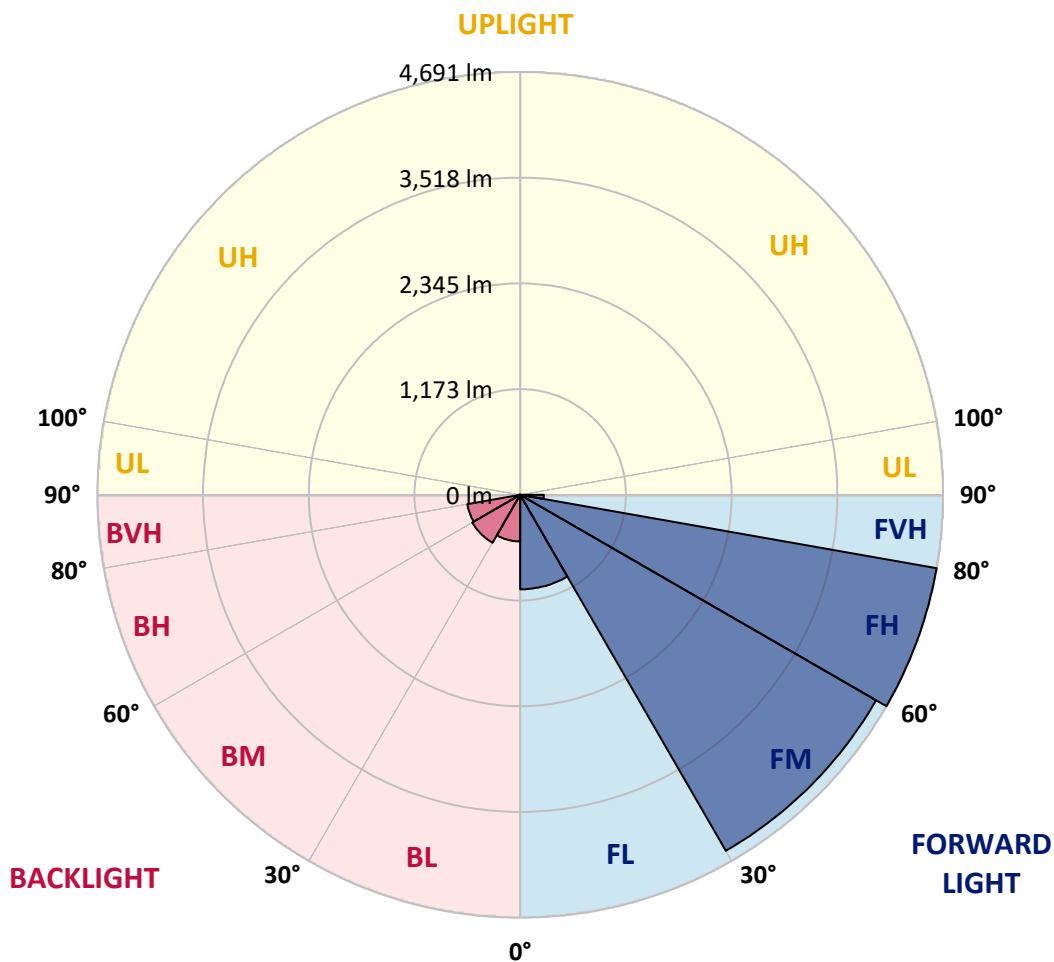
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1048.1	8.5			
FM	(30°-60°)	4560.0	37.0			
FH	(60°-80°)	4690.7	38.1			G2/5000
FVH	(80°-90°)	263.4	2.1			G3/500
BL	(0°-30°)	517.8	4.2	B2/1000		
BM	(30°-60°)	613.8	5.0	B1/1000		
BH	(60°-80°)	595.8	4.8	B2/1000		G2/1000
BVH	(80°-90°)	29.7	0.2			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 III Medium





REPORT NUMBER: P198719

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3
2.5°	3227.1	3235.8	3235.8	3228.6	3224.8	3201.8	3188.3	3178.9	3162.2	3131.5	3103.8
5°	3111.7	3128.3	3135.4	3138.6	3159.2	3152.0	3152.8	3146.5	3132.3	3099.1	3054.0
7.5°	2900.1	2903.1	2915.8	2937.2	2986.9	3021.7	3050.1	3055.7	3052.5	3028.0	2964.8
10°	2691.5	2697.0	2712.0	2748.4	2795.7	2845.5	2907.1	2932.4	2951.4	2943.4	2863.6
12.5°	2518.5	2519.2	2535.8	2577.7	2630.6	2693.0	2776.8	2816.3	2861.3	2879.5	2790.2
15°	2351.8	2362.8	2378.7	2429.2	2494.8	2573.7	2670.1	2724.6	2783.9	2836.0	2733.3
17.5°	2225.3	2234.0	2243.5	2285.4	2361.3	2460.0	2579.3	2637.8	2715.9	2795.7	2674.9
20°	2155.9	2159.0	2151.9	2172.4	2236.5	2343.1	2481.4	2551.6	2644.8	2757.1	2614.9
22.5°	2141.6	2141.6	2115.6	2111.6	2140.0	2230.1	2380.2	2466.3	2580.1	2730.2	2561.2
25°	2208.0	2203.2	2154.2	2109.2	2099.0	2144.8	2283.8	2389.7	2524.7	2729.3	2520.9
27.5°	2333.6	2327.3	2266.4	2190.6	2125.1	2105.3	2209.6	2317.8	2481.4	2756.2	2500.3
30°	2490.1	2487.6	2426.0	2331.2	2223.0	2121.1	2180.3	2280.7	2452.1	2806.1	2499.5
32.5°	2661.4	2650.4	2612.5	2517.7	2377.0	2208.8	2197.7	2282.2	2444.2	2878.7	2517.7
35°	2843.9	2836.0	2826.5	2731.0	2572.9	2363.6	2274.3	2336.7	2482.9	2979.9	2569.0
37.5°	3076.2	3067.5	3083.3	2979.0	2806.1	2566.7	2403.9	2445.8	2561.9	3126.8	2664.6
40°	3489.4	3464.0	3419.8	3259.4	3077.8	2815.5	2591.1	2597.5	2697.0	3323.5	2817.8
42.5°	4167.9	4086.6	3867.8	3573.1	3364.5	3104.7	2835.2	2805.2	2883.4	3583.4	3040.6
45°	4848.1	4756.5	4386.7	3915.1	3661.6	3415.1	3137.0	3065.2	3115.7	3885.9	3327.4
47.5°	5287.3	5242.3	4825.2	4257.2	3972.8	3753.2	3482.2	3363.8	3400.1	4228.8	3681.3
50°	5416.1	5377.4	5049.6	4525.0	4266.7	4161.6	3909.6	3752.4	3758.7	4629.3	4105.5
52.5°	5319.8	5303.9	5086.7	4690.9	4536.9	4592.1	4501.3	4282.5	4230.3	5068.5	4565.3
55°	5191.0	5196.5	5112.7	4857.6	4811.8	4993.4	5275.5	5099.3	4878.1	5525.9	5044.1
57.5°	4785.7	4789.7	5009.3	5175.2	5336.3	5556.0	5878.3	5804.0	5546.4	6019.7	5580.4
60°	3853.6	3884.3	4373.3	5109.6	5935.9	6664.3	6743.3	6615.3	6257.4	6588.4	6278.0
62.5°	2753.1	2780.7	3347.2	4435.7	5865.6	7918.8	8340.6	7831.9	7222.0	7439.2	7259.2
65°	1446.5	1441.7	1880.2	3065.2	4940.5	8209.5	10857.5	9991.7	8847.0	8609.3	8207.1
67.5°	808.1	834.2	1004.0	1546.0	3219.9	7225.2	12465.1	12720.3	11106.4	9537.5	8166.0
69°	747.4	756.0	869.8	1195.2	2099.0	5961.1	12326.9	13544.2	12059.1	9541.4	7639.9
70°	726.0	735.5	838.9	1101.2	1763.3	4884.5	11823.7	13447.8	12290.5	9329.7	7161.2
72.5°	650.9	663.6	763.9	989.8	1485.9	2517.7	9524.0	11510.0	11133.2	8154.1	5552.8
75°	555.4	576.6	728.3	982.7	1407.8	1600.5	6351.4	8575.2	8286.1	5831.6	3150.5
77.5°	229.9	232.2	318.3	719.6	1477.2	1531.8	3413.5	5431.9	4808.6	2557.2	948.8
80°	160.4	157.2	158.8	210.1	1192.0	1542.0	1751.4	2762.6	2147.2	674.6	444.0
82.5°	135.1	133.5	139.8	132.0	403.7	1749.8	1464.7	1440.1	1011.2	363.4	211.8
85°	89.3	86.8	114.6	120.1	192.0	1389.6	1575.2	1132.0	753.6	194.4	90.0
87.5°	43.5	44.2	65.6	81.3	101.9	440.0	1508.9	895.1	582.3	84.5	36.3
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°	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3	3143.3
2.5°	3092.8	3069.1	3047.8	3020.9	3000.3	2982.9	2959.3	2958.5	2954.5	2960.0	2961.6
5°	3024.0	2984.6	2924.5	2857.4	2809.9	2747.5	2686.7	2666.2	2643.3	2641.0	2648.0
7.5°	2920.5	2858.9	2756.2	2653.5	2550.8	2445.8	2346.2	2295.7	2246.7	2231.7	2238.8
10°	2805.2	2727.0	2569.9	2402.3	2257.8	2101.3	1949.6	1851.7	1762.4	1724.5	1734.0
12.5°	2715.1	2615.6	2394.4	2177.1	1960.7	1736.4	1536.5	1342.9	1196.9	1131.3	1135.2
15°	2637.8	2510.5	2230.1	1940.9	1670.1	1362.7	1085.5	861.1	733.1	685.7	684.1
17.5°	2554.0	2399.9	2058.7	1721.3	1369.8	989.8	726.8	594.0	543.5	527.7	527.7
20°	2464.7	2286.2	1879.4	1482.1	1053.8	691.2	546.7	495.3	476.4	471.6	470.9
22.5°	2381.8	2174.8	1699.2	1226.8	762.3	524.6	465.3	445.6	442.4	446.3	446.3
25°	2316.3	2076.9	1516.7	958.2	554.5	439.3	414.0	411.5	423.4	437.6	440.0
27.5°	2267.3	1989.1	1336.7	699.9	436.1	382.4	373.7	383.9	411.5	440.0	445.6
30°	2233.3	1914.1	1120.9	503.2	363.4	334.9	338.9	357.1	399.0	442.4	454.2
32.5°	2218.3	1853.3	903.8	386.3	310.5	294.7	304.9	328.7	372.0	415.5	429.7
35°	2232.5	1809.1	703.1	320.7	271.8	259.9	271.8	296.2	324.7	346.0	354.7
37.5°	2283.8	1793.2	529.3	284.4	246.4	234.7	244.1	260.6	273.3	281.2	285.2
40°	2392.1	1809.8	414.7	265.5	232.2	218.8	221.2	229.1	237.7	244.1	244.9
42.5°	2564.2	1864.3	368.9	258.3	223.5	206.2	202.2	207.8	217.3	226.0	227.5
45°	2793.4	1955.2	364.2	260.6	219.6	195.9	188.0	193.5	206.2	220.4	222.8
47.5°	3089.6	2099.0	386.3	273.3	222.0	190.4	178.5	184.0	200.7	219.6	222.8
50°	3440.4	2298.1	427.4	292.3	233.0	190.4	174.6	179.3	196.7	218.0	221.2
52.5°	3853.6	2575.4	470.0	311.3	248.9	197.5	176.2	175.3	191.2	210.9	214.9
55°	4309.4	2919.8	511.2	327.9	257.6	206.9	180.1	170.6	183.3	199.1	202.2
57.5°	4845.7	3391.4	583.0	343.6	262.3	214.1	184.8	165.9	173.0	184.0	186.5
60°	5573.3	4084.2	722.8	370.5	271.0	217.3	185.7	161.1	160.4	168.3	169.1
62.5°	6522.1	4895.5	856.3	402.1	288.4	218.0	182.5	158.0	150.1	152.4	152.4
65°	7196.8	5194.1	817.6	428.9	304.1	217.3	179.3	155.6	142.2	138.2	138.2
67.5°	6812.8	4588.2	694.4	436.1	305.8	208.6	172.3	150.1	135.1	125.6	125.6
69°	6248.8	4021.8	637.5	423.4	293.1	198.2	164.3	144.5	130.3	119.3	119.3
70°	5789.0	3592.8	602.7	408.5	278.0	189.6	157.2	139.0	125.6	116.1	115.3
72.5°	4322.0	2397.6	515.1	352.3	228.3	160.4	137.5	124.0	112.9	106.7	106.7
75°	2280.7	1201.6	421.9	287.6	176.2	128.0	112.9	104.2	98.0	97.2	96.4
77.5°	747.4	543.5	303.3	216.5	129.6	99.5	90.0	84.5	83.8	86.8	86.8
80°	403.7	324.7	195.1	146.2	90.0	74.3	69.6	68.7	71.1	75.8	75.8
82.5°	195.9	160.4	116.1	90.0	61.6	54.5	54.5	55.3	58.4	64.0	64.0
85°	84.5	75.8	67.1	50.5	38.0	34.0	38.7	42.7	45.0	49.0	50.5
87.5°	40.3	35.6	30.8	19.7	16.6	17.4	20.6	25.3	30.0	33.1	34.0
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)