

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: P198865

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198865
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-SL2-7050-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1200mA 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: 12968 lumens
Efficiency: N/A
Efficacy: 101.3 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

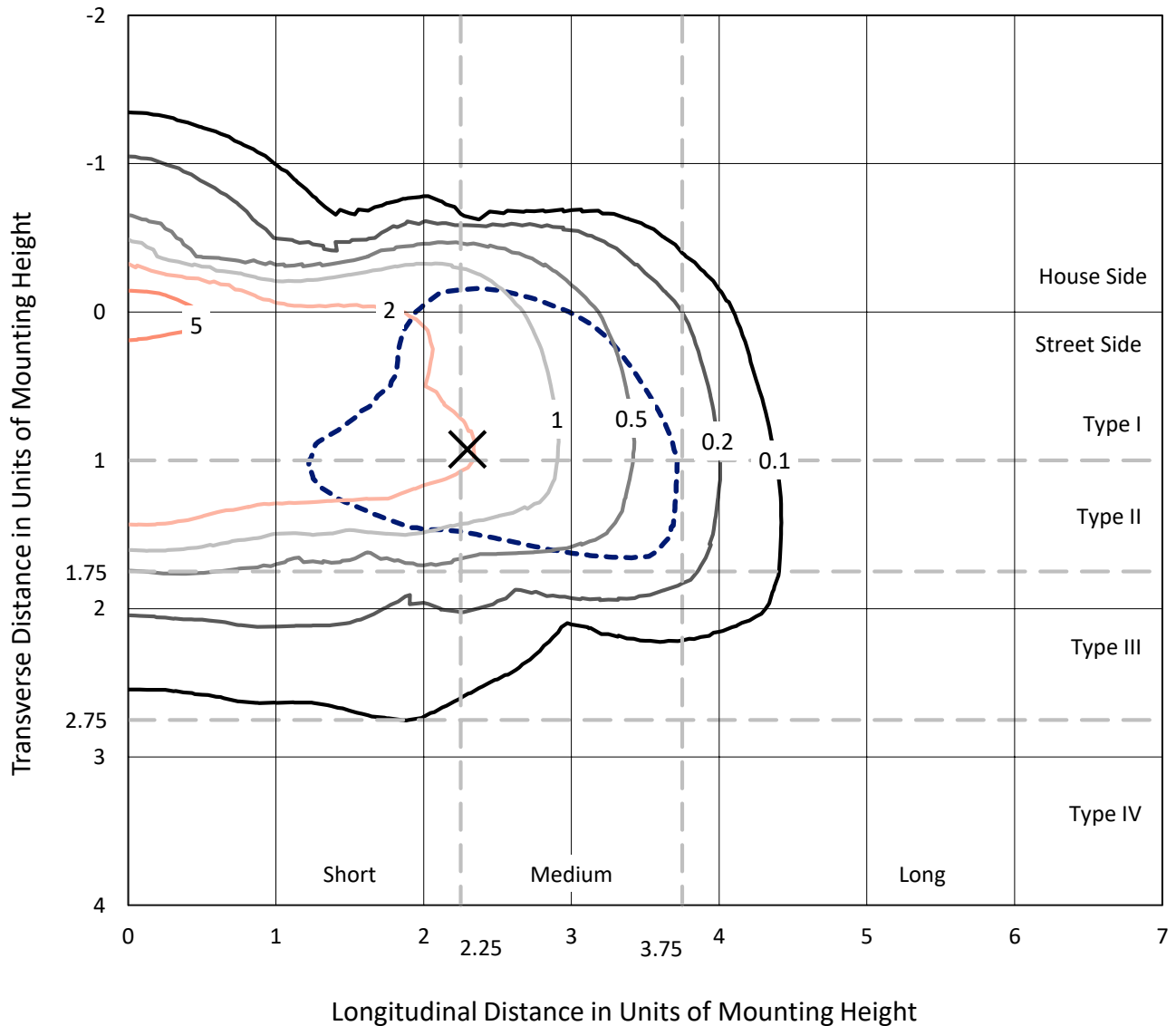
Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

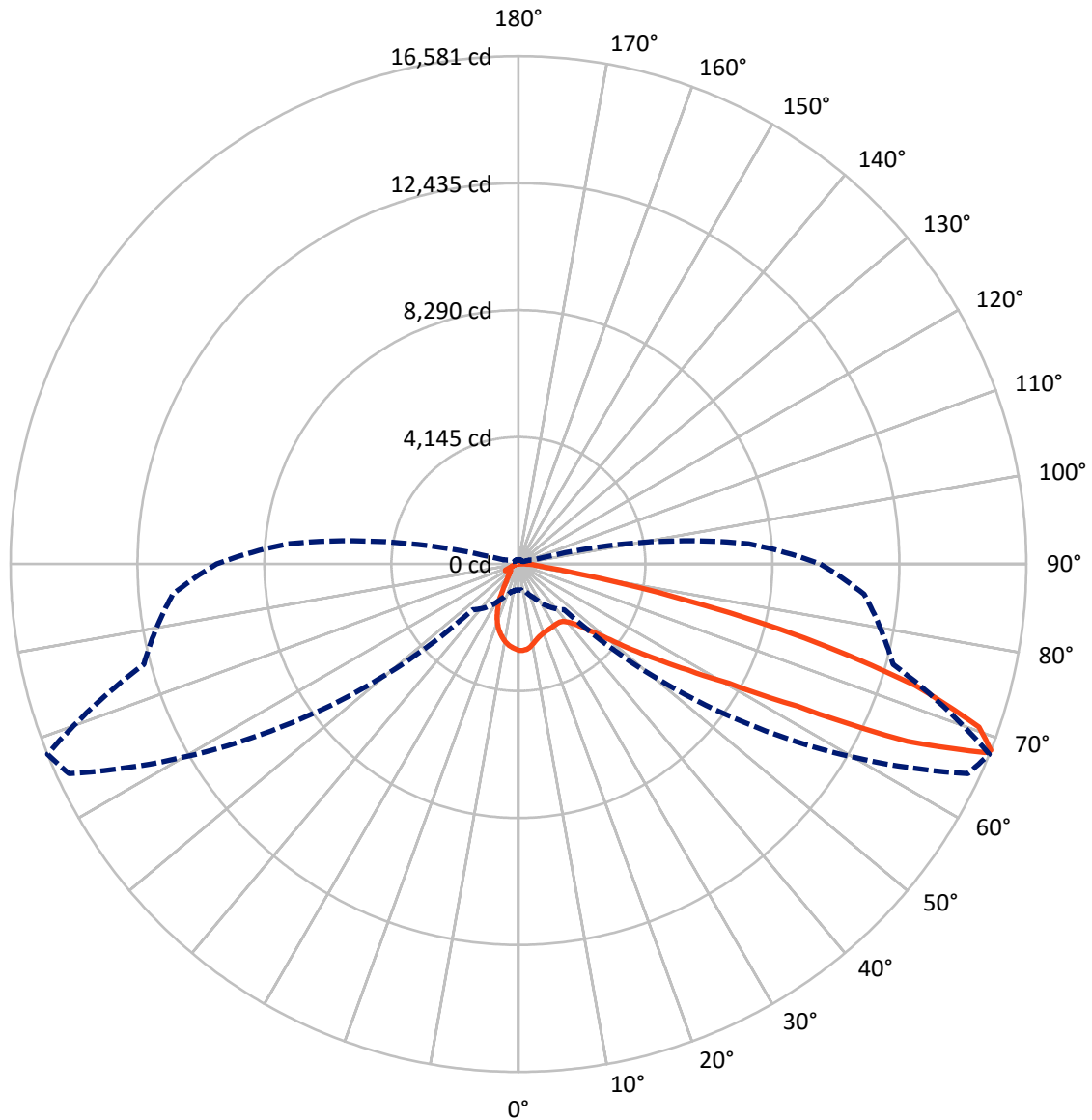
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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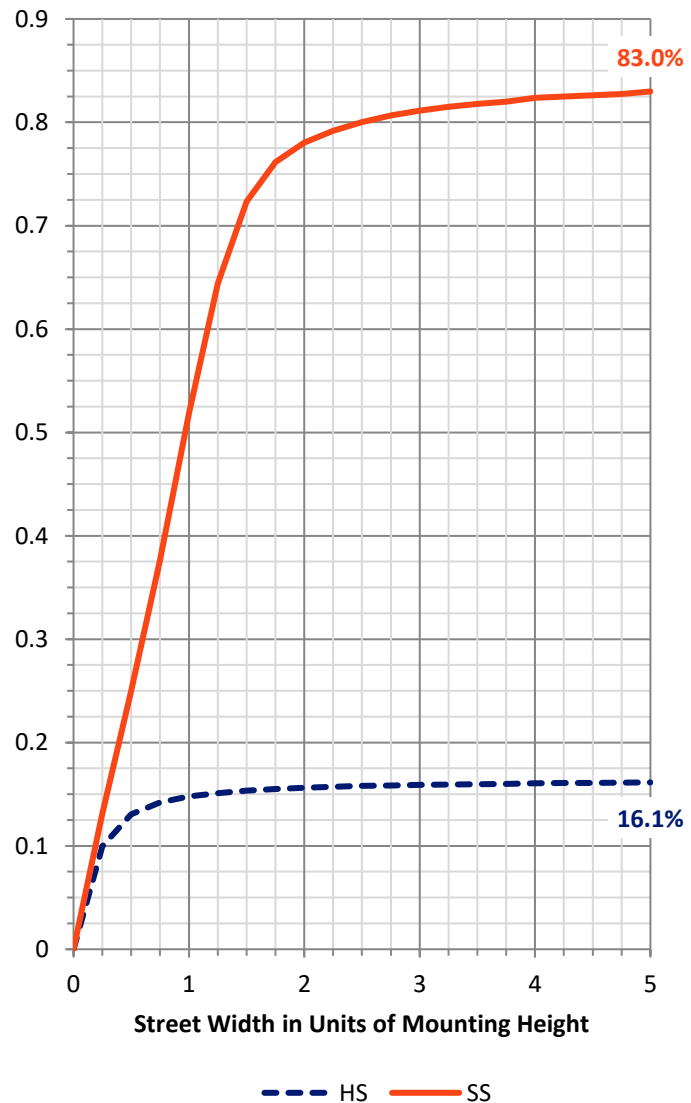
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2121.6	0.0	2121.6
	% Fixture	16.4	0.0	16.4
Street Side	Lumens	10846.4	0.0	10846.4
	% Fixture	83.6	0.0	83.6
Total	Lumens	12968.0	0.0	12968.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.8	1.9
10°-20°	560.8	4.3
20°-30°	758.4	5.8
30°-40°	1069.3	8.2
40°-50°	1758.4	13.6
50°-60°	2725.6	21.0
60°-70°	3534.0	27.3
70°-80°	2028.0	15.6
80°-90°	291.8	2.3
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°	12968.0	100.0
0°-180°	12968.0	100.0



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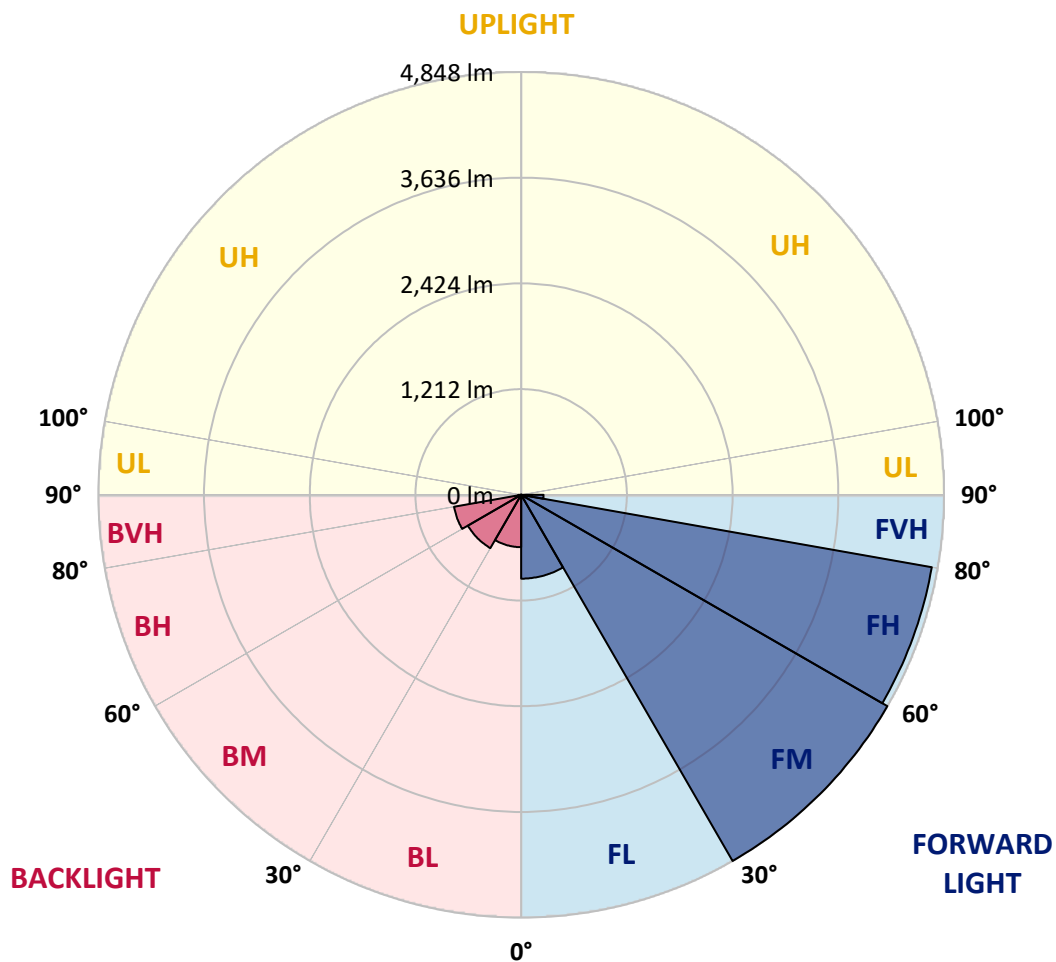
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	961.1	7.4			
FM	(30°-60°)	4847.7	37.4			
FH	(60°-80°)	4780.6	36.9			G2/5000
FVH	(80°-90°)	257.0	2.0			G3/500
BL	(0°-30°)	599.8	4.6	B2/1000		
BM	(30°-60°)	705.7	5.4	B1/1000		
BH	(60°-80°)	781.4	6.0	B2/1000		G2/1000
BVH	(80°-90°)	34.8	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7
2.5°	2746.3	2768.4	2768.4	2784.4	2798.8	2810.7	2820.9	2820.9	2820.9	2814.1	2808.2
5°	2457.5	2487.1	2491.3	2532.0	2585.4	2650.6	2723.5	2787.8	2800.5	2824.3	2833.6
7.5°	2256.7	2266.0	2282.1	2310.1	2364.3	2444.8	2559.1	2703.1	2737.9	2812.4	2851.4
10°	2114.4	2122.0	2135.6	2163.5	2212.6	2285.5	2398.2	2585.4	2643.0	2775.1	2852.2
12.5°	2010.2	2016.1	2028.8	2054.2	2104.2	2169.4	2284.7	2479.5	2550.6	2737.9	2864.1
15°	1928.9	1939.0	1949.2	1973.8	2024.6	2087.3	2204.2	2402.4	2479.5	2708.2	2886.1
17.5°	1896.7	1901.8	1903.5	1916.2	1961.9	2025.4	2142.3	2348.2	2427.8	2684.5	2903.0
20°	1917.0	1917.9	1900.9	1892.4	1918.7	1977.2	2090.7	2307.5	2388.8	2663.3	2909.8
22.5°	2006.0	2006.0	1961.9	1924.6	1906.8	1943.3	2055.9	2279.6	2367.7	2647.2	2909.8
25°	2175.4	2167.8	2099.1	2025.4	1946.7	1931.4	2033.9	2261.8	2351.6	2638.7	2898.8
27.5°	2398.2	2391.4	2304.1	2194.9	2052.5	1956.8	2026.3	2247.4	2335.5	2626.0	2875.1
30°	2669.2	2663.3	2564.2	2421.0	2211.0	2037.3	2044.1	2237.2	2322.8	2604.9	2835.3
32.5°	2939.5	2936.1	2857.3	2710.7	2429.5	2173.7	2090.7	2235.5	2316.0	2579.4	2787.0
35°	3211.4	3211.4	3163.1	3039.4	2723.5	2378.7	2188.1	2266.9	2328.7	2565.9	2745.5
37.5°	3612.9	3596.8	3507.0	3379.1	3093.6	2644.7	2345.6	2332.9	2377.8	2588.8	2731.9
40°	4234.7	4188.1	3963.6	3748.5	3497.7	2985.2	2576.1	2460.9	2488.0	2666.7	2764.1
42.5°	4885.3	4811.6	4514.2	4170.3	3915.3	3405.4	2878.5	2668.4	2667.5	2817.5	2866.6
45°	5443.5	5405.4	5083.5	4647.2	4392.3	3878.1	3260.5	2976.7	2946.2	3051.3	3064.0
47.5°	5768.0	5742.6	5548.6	5152.1	4958.1	4436.3	3745.1	3404.5	3346.9	3409.6	3390.1
50°	5678.2	5702.7	5646.8	5444.4	5566.4	5220.7	4362.6	3990.7	3881.5	3944.1	3896.7
52.5°	5205.5	5271.6	5321.5	5360.5	5916.2	6270.3	5138.6	4722.6	4632.0	4621.0	4575.2
55°	4354.1	4459.2	4616.7	4903.1	5822.2	7113.2	6493.9	5607.9	5475.7	5406.3	5424.0
57.5°	2963.2	3122.4	3462.1	4006.8	5333.4	7472.4	8498.2	6751.5	6527.8	6280.5	6338.1
60°	1632.4	1765.4	2169.4	2718.4	4217.8	7419.0	10274.6	8610.0	7906.1	7250.4	7369.0
62.5°	1056.3	1085.1	1385.9	1856.9	2588.8	6549.8	11261.5	11716.4	10224.6	8529.5	8696.4
65°	848.8	869.1	1016.5	1497.7	1803.5	4213.5	11305.5	14938.8	13955.3	10267.8	10272.9
67.5°	829.3	838.6	924.2	1259.7	1691.7	2294.0	9772.3	16209.4	16437.3	12319.5	11327.5
68°	841.2	852.2	938.6	1220.7	1690.8	2114.4	9031.9	16190.0	16580.5	12662.6	11327.5
70°	742.1	755.6	957.2	1263.0	1618.8	1817.9	6184.7	15330.1	15958.7	13451.2	10748.1
72.5°	388.0	377.0	473.5	997.0	1822.1	1894.1	3267.3	12807.4	13541.0	12457.6	9286.0
75°	302.4	275.3	265.1	393.9	1602.7	1964.4	1897.5	9103.0	9657.0	8980.2	6206.8
77.5°	284.6	251.6	232.1	233.0	705.6	2044.1	1535.0	5357.1	5357.1	4283.8	1980.5
80°	228.7	198.2	185.5	211.8	340.5	1884.0	1601.9	2441.4	2082.2	1107.2	545.5
82.5°	150.8	134.7	135.5	172.0	258.4	1258.0	1855.2	1205.4	905.6	490.5	321.1
85°	95.7	82.2	91.5	120.3	193.1	560.8	1836.5	837.8	599.8	275.3	160.1
87.5°	48.3	37.3	45.7	62.7	117.7	161.0	1512.1	748.0	444.7	114.4	87.3
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°	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7	2821.7
2.5°	2808.2	2789.5	2780.2	2765.0	2746.3	2727.7	2715.0	2709.1	2705.7	2707.4	2706.5
5°	2828.5	2803.9	2764.1	2707.4	2648.9	2587.1	2539.6	2503.2	2480.3	2473.6	2471.9
7.5°	2843.7	2808.2	2733.6	2630.3	2530.3	2421.9	2329.6	2255.9	2205.9	2183.0	2182.2
10°	2841.2	2795.5	2677.7	2525.2	2378.7	2219.4	2074.6	1950.9	1861.1	1817.9	1816.2
12.5°	2843.7	2781.1	2609.1	2402.4	2192.3	1964.4	1749.3	1557.0	1423.1	1359.6	1357.1
15°	2853.9	2765.8	2538.8	2265.2	1974.6	1652.7	1345.2	1103.8	981.8	940.3	940.3
17.5°	2853.1	2740.4	2457.5	2105.9	1716.2	1285.1	918.3	769.2	757.3	795.4	801.4
20°	2836.1	2699.7	2352.4	1917.0	1413.0	889.5	622.6	601.4	696.3	801.4	813.2
22.5°	2809.9	2647.2	2231.3	1697.6	1059.7	579.4	480.3	512.5	641.3	771.7	790.4
25°	2773.4	2583.7	2092.4	1442.6	704.8	416.8	400.7	440.5	531.1	618.4	631.9
27.5°	2720.1	2503.2	1940.7	1166.5	449.8	343.1	349.0	377.0	415.9	453.2	460.8
30°	2653.1	2409.2	1775.5	860.7	341.4	306.7	316.8	333.8	350.7	374.4	379.5
32.5°	2585.4	2313.5	1603.6	591.3	298.2	287.2	297.3	306.7	321.1	337.1	340.5
35°	2524.4	2224.5	1426.5	412.5	279.5	274.5	279.5	285.5	299.9	316.0	317.7
37.5°	2480.3	2151.7	1241.9	326.1	268.5	263.5	266.0	268.5	285.5	309.2	311.7
40°	2474.4	2103.4	1054.7	293.1	260.1	253.3	251.6	253.3	275.3	302.4	305.0
42.5°	2532.0	2105.9	871.7	279.5	253.3	245.7	238.9	242.3	261.8	282.9	284.6
45°	2668.4	2165.2	713.3	273.6	247.4	241.4	231.3	233.0	242.3	253.3	255.0
47.5°	2909.0	2294.8	592.1	270.2	242.3	237.2	224.5	219.4	220.2	226.2	226.2
50°	3293.6	2511.7	518.4	266.8	238.0	228.7	214.3	204.2	201.6	205.0	205.8
52.5°	3867.1	2883.6	482.9	260.1	230.4	217.7	201.6	191.4	187.2	190.6	190.6
55°	4642.2	3477.4	465.9	250.7	221.1	204.2	189.8	181.3	177.9	180.4	180.4
57.5°	5525.7	4249.1	494.7	238.0	209.2	189.8	179.6	173.7	171.1	173.7	174.5
60°	6575.3	5258.9	692.9	221.9	196.5	177.0	171.1	167.7	166.0	168.6	168.6
62.5°	7970.5	6602.4	1072.4	209.2	183.0	165.2	163.5	161.8	160.1	162.6	162.6
65°	9476.6	7824.7	1103.8	201.6	171.1	155.0	155.9	155.9	154.2	156.7	156.7
67.5°	9956.1	7718.9	616.7	192.3	156.7	144.9	148.2	148.2	147.4	149.9	149.1
68°	9854.4	7551.1	537.1	189.8	154.2	142.3	145.7	146.5	145.7	148.2	147.4
70°	9097.1	6629.5	353.2	175.4	143.2	133.8	138.9	139.8	138.9	142.3	141.5
72.5°	7509.6	4972.5	260.9	153.3	129.6	122.8	127.9	128.8	129.6	133.0	132.1
75°	4769.2	2746.3	205.8	130.5	116.1	110.1	115.2	117.7	119.4	124.5	122.0
77.5°	1306.2	833.6	166.9	111.0	100.0	97.4	100.8	104.2	105.9	111.8	107.6
80°	457.4	368.5	138.9	94.0	83.0	82.2	85.6	88.9	90.6	95.7	90.6
82.5°	277.9	240.6	111.0	73.7	65.2	64.4	68.6	72.0	73.7	73.7	70.3
85°	144.9	127.1	81.3	51.7	44.9	42.4	50.0	54.2	55.1	54.2	51.7
87.5°	81.3	72.0	43.2	24.6	20.3	21.2	26.3	32.2	34.7	33.9	32.2
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)