

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: P198863

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198863
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
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 11822 lumens
Efficiency: N/A
Efficacy: 106.5 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

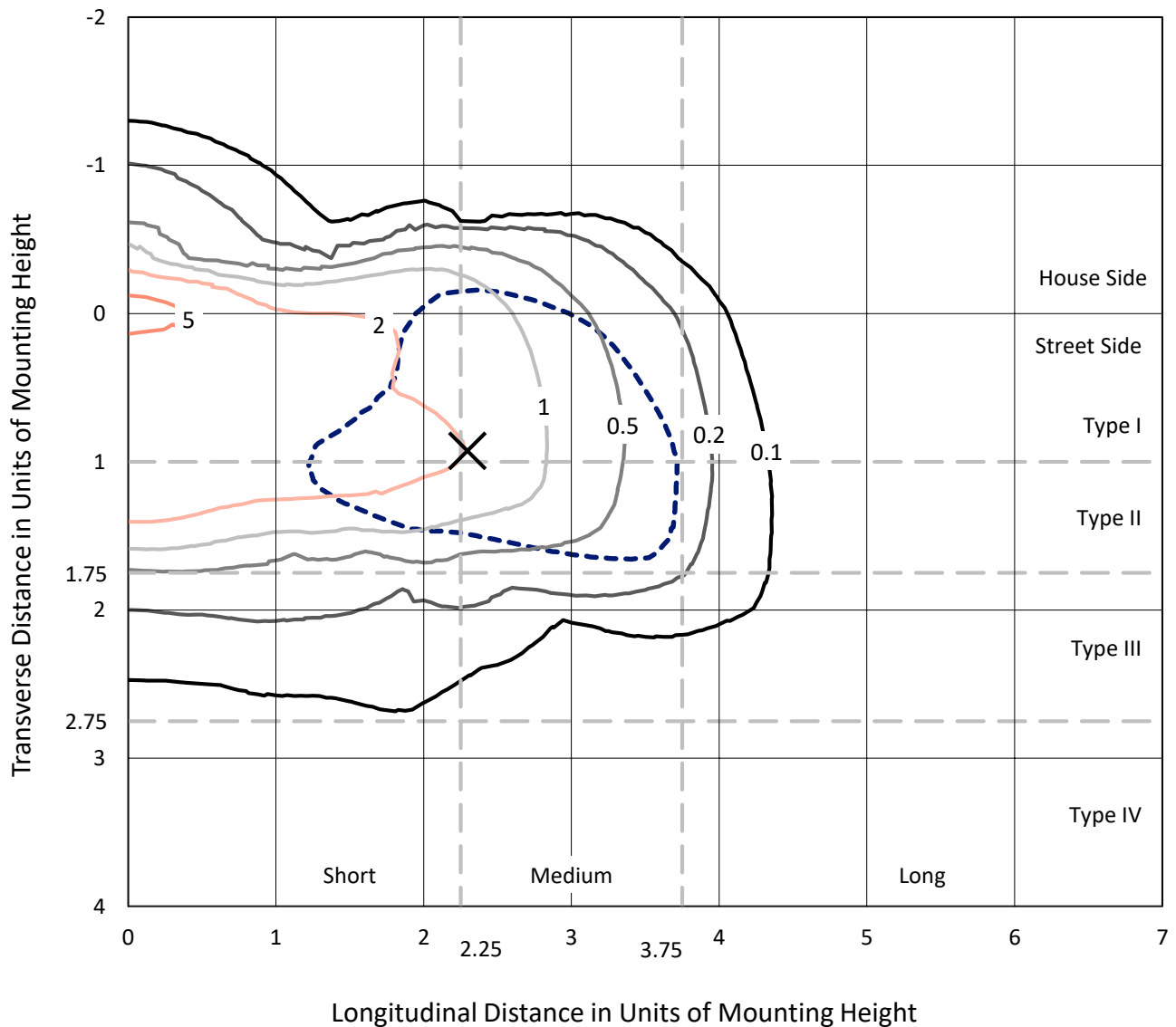
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

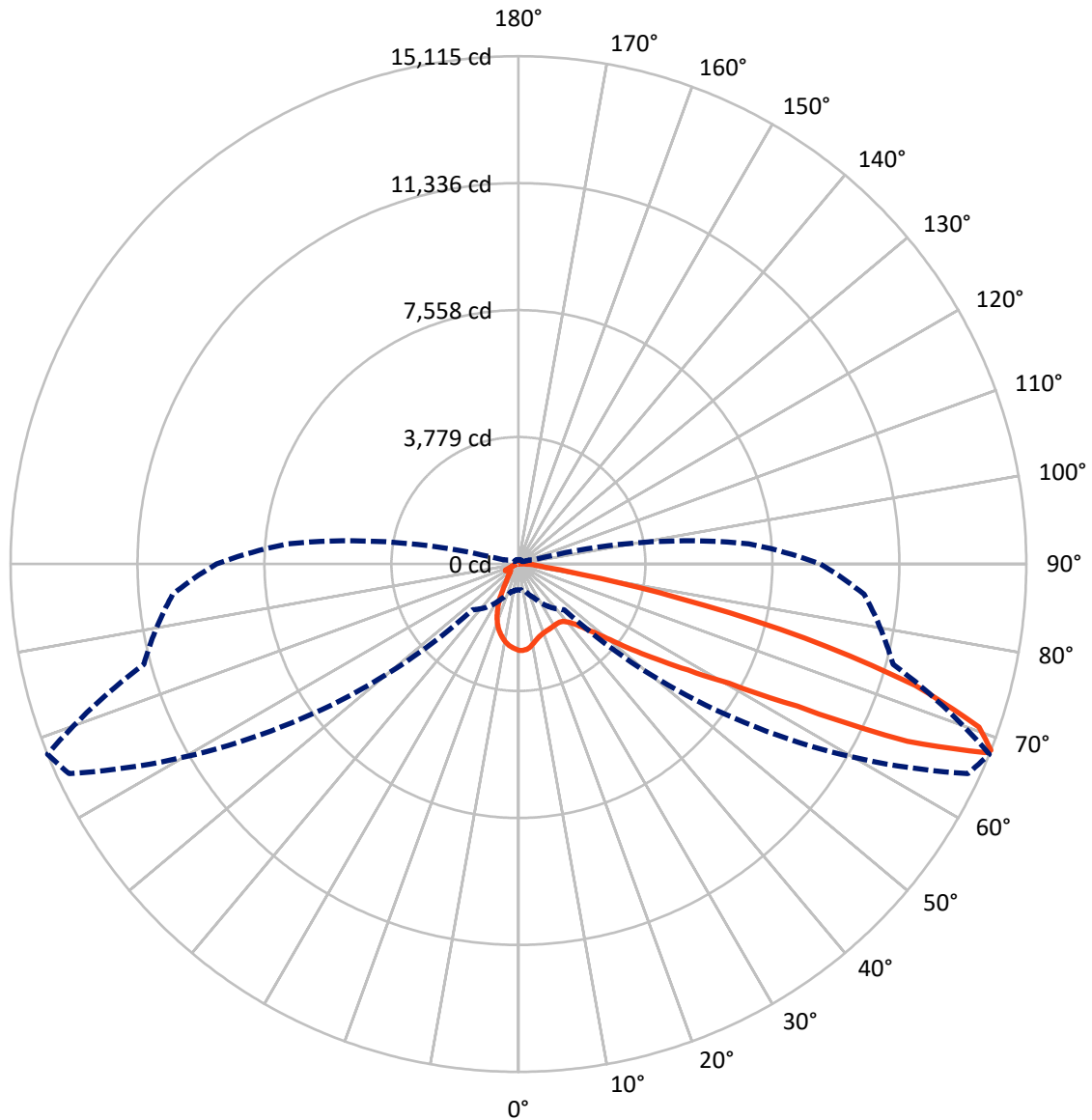
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 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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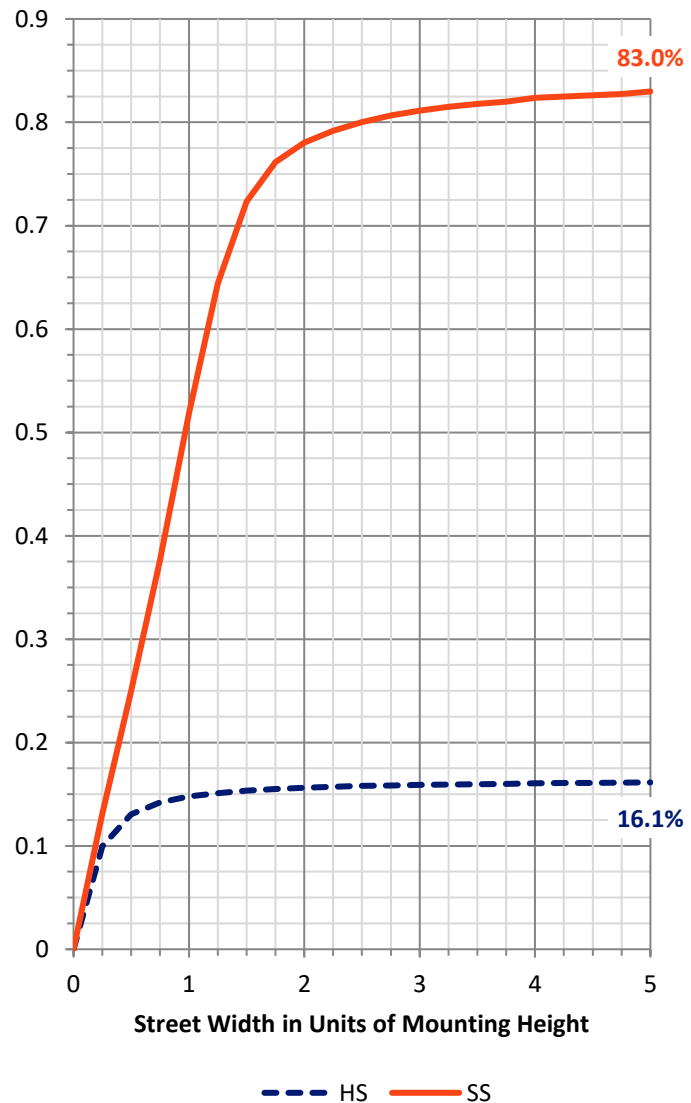
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1934.1	0.0	1934.1
	% Fixture	16.4	0.0	16.4
Street Side	Lumens	9887.9	0.0	9887.9
	% Fixture	83.6	0.0	83.6
Total	Lumens	11822.0	0.0	11822.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.4	1.9
10°-20°	511.2	4.3
20°-30°	691.4	5.8
30°-40°	974.8	8.2
40°-50°	1603.0	13.6
50°-60°	2484.8	21.0
60°-70°	3221.7	27.3
70°-80°	1848.8	15.6
80°-90°	266.0	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°	11822.0	100.0
0°-180°	11822.0	100.0

Coefficient of Utilization



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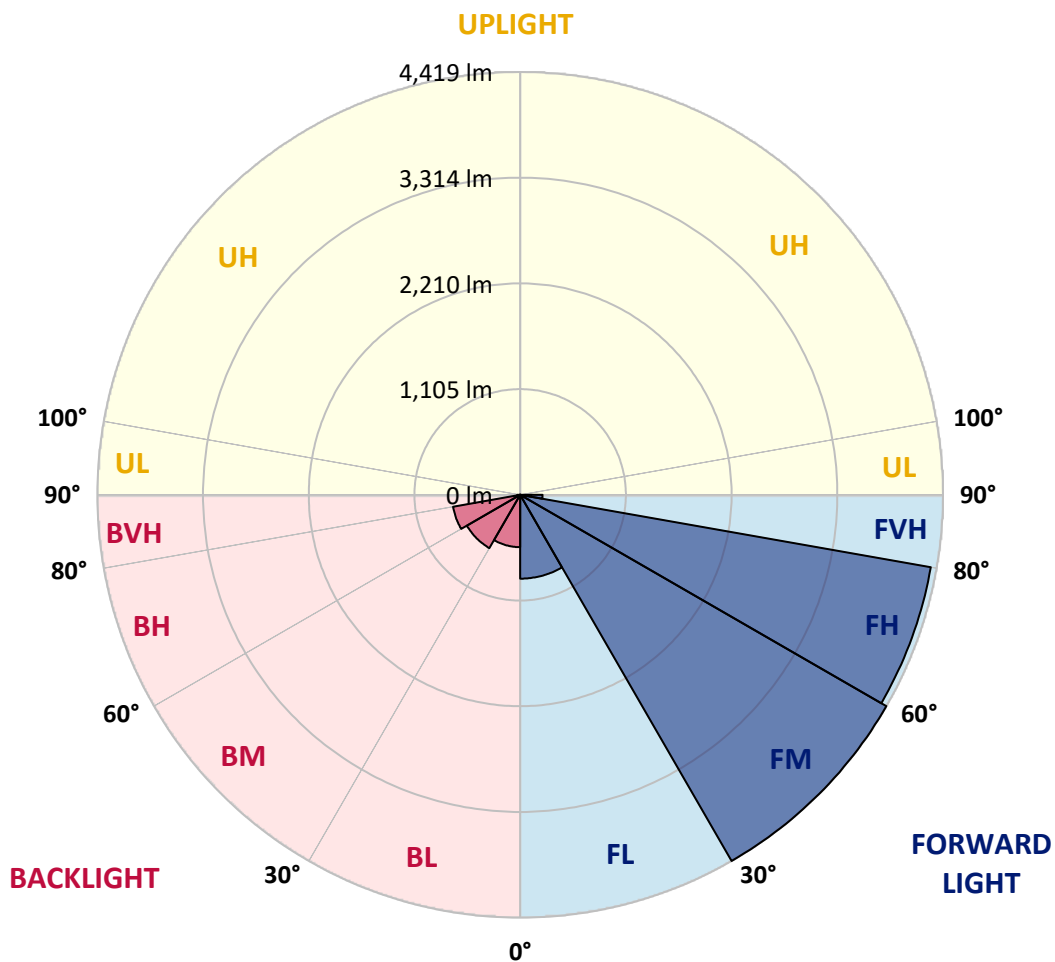
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	876.2	7.4			
FM	(30°-60°)	4419.3	37.4			
FH	(60°-80°)	4358.1	36.9			G2/5000
FVH	(80°-90°)	234.3	2.0			G3/500
BL	(0°-30°)	546.8	4.6	B2/1000		
BM	(30°-60°)	643.3	5.4	B1/1000		
BH	(60°-80°)	712.3	6.0	B2/1000		G2/1000
BVH	(80°-90°)	31.7	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°	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4
2.5°	2503.6	2523.7	2523.7	2538.4	2551.5	2562.3	2571.6	2571.6	2571.6	2565.4	2560.0
5°	2240.3	2267.3	2271.2	2308.3	2356.9	2416.4	2482.8	2541.5	2553.1	2574.7	2583.2
7.5°	2057.3	2065.8	2080.4	2105.9	2155.3	2228.7	2333.0	2464.2	2495.9	2563.9	2599.4
10°	1927.5	1934.5	1946.8	1972.3	2017.1	2083.5	2186.2	2356.9	2409.4	2529.9	2600.2
12.5°	1832.5	1838.0	1849.5	1872.7	1918.3	1977.7	2082.8	2260.4	2325.2	2495.9	2611.0
15°	1758.4	1767.7	1776.9	1799.3	1845.7	1902.8	2009.4	2190.1	2260.4	2468.9	2631.1
17.5°	1729.1	1733.7	1735.2	1746.8	1788.5	1846.4	1953.0	2140.7	2213.3	2447.3	2646.5
20°	1747.6	1748.4	1732.9	1725.2	1749.1	1802.4	1905.9	2103.6	2177.7	2428.0	2652.7
22.5°	1828.7	1828.7	1788.5	1754.5	1738.3	1771.5	1874.2	2078.1	2158.4	2413.3	2652.7
25°	1983.1	1976.2	1913.6	1846.4	1774.6	1760.7	1854.2	2061.9	2143.8	2405.6	2642.6
27.5°	2186.2	2180.1	2100.5	2000.9	1871.2	1783.9	1847.2	2048.8	2129.1	2394.0	2621.0
30°	2433.4	2428.0	2337.6	2207.1	2015.6	1857.3	1863.4	2039.5	2117.5	2374.7	2584.7
32.5°	2679.7	2676.6	2604.8	2471.2	2214.8	1981.6	1905.9	2038.0	2111.3	2351.5	2540.7
35°	2927.6	2927.6	2883.6	2770.8	2482.8	2168.5	1994.7	2066.5	2122.9	2339.1	2502.9
37.5°	3293.6	3279.0	3197.1	3080.5	2820.3	2411.0	2138.4	2126.8	2167.7	2360.0	2490.5
40°	3860.5	3818.0	3613.4	3417.2	3188.6	2721.4	2348.4	2243.4	2268.1	2431.0	2519.8
42.5°	4453.6	4386.4	4115.3	3801.8	3569.3	3104.4	2624.1	2432.6	2431.8	2568.5	2613.3
45°	4962.5	4927.7	4634.3	4236.6	4004.1	3535.4	2972.4	2713.7	2685.9	2781.6	2793.2
47.5°	5258.2	5235.1	5058.2	4696.8	4520.0	4044.3	3414.1	3103.7	3051.2	3108.3	3090.5
50°	5176.4	5198.8	5147.8	4963.2	5074.4	4759.4	3977.1	3638.1	3538.4	3595.6	3552.3
52.5°	4745.5	4805.7	4851.3	4886.8	5393.4	5716.2	4684.5	4305.3	4222.7	4212.6	4170.9
55°	3969.4	4065.1	4208.8	4469.8	5307.7	6484.6	5920.1	5112.3	4991.8	4928.5	4944.7
57.5°	2701.3	2846.5	3156.2	3652.7	4862.1	6812.0	7747.2	6154.8	5951.0	5725.5	5778.0
60°	1488.1	1609.4	1977.7	2478.1	3845.0	6763.4	9366.6	7849.1	7207.4	6609.7	6717.8
62.5°	963.0	989.3	1263.4	1692.8	2360.0	5971.0	10266.3	10681.0	9321.0	7775.8	7927.9
65°	773.8	792.3	926.7	1365.3	1644.1	3841.2	10306.4	13618.6	12722.0	9360.4	9365.1
67.5°	756.0	764.5	842.5	1148.3	1542.2	2091.3	8908.7	14777.0	14984.7	11230.8	10326.5
68°	766.8	776.9	855.7	1112.8	1541.4	1927.5	8233.7	14759.2	15115.2	11543.6	10326.5
70°	676.5	688.8	872.6	1151.4	1475.8	1657.2	5638.2	13975.4	14548.4	12262.5	9798.3
72.5°	353.7	343.7	431.7	908.9	1661.1	1726.7	2978.6	11675.6	12344.4	11356.7	8465.4
75°	275.7	251.0	241.7	359.1	1461.1	1790.8	1729.8	8298.6	8803.6	8186.6	5658.3
77.5°	259.5	229.4	211.6	212.4	643.3	1863.4	1399.3	4883.7	4883.7	3905.3	1805.5
80°	208.5	180.7	169.1	193.1	310.4	1717.5	1460.3	2225.6	1898.2	1009.3	497.3
82.5°	137.5	122.8	123.6	156.8	235.5	1146.8	1691.2	1098.9	825.5	447.1	292.7
85°	87.3	74.9	83.4	109.7	176.1	511.2	1674.2	763.8	546.8	251.0	146.0
87.5°	44.0	34.0	41.7	57.1	107.3	146.7	1378.5	681.9	405.4	104.3	79.5
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°	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4	2572.4
2.5°	2560.0	2543.0	2534.5	2520.6	2503.6	2486.6	2475.1	2469.7	2466.6	2468.1	2467.3
5°	2578.5	2556.1	2519.8	2468.1	2414.8	2358.4	2315.2	2282.0	2261.1	2255.0	2253.4
7.5°	2592.4	2560.0	2492.0	2397.8	2306.7	2207.9	2123.7	2056.5	2010.9	1990.1	1989.3
10°	2590.1	2548.4	2441.1	2302.1	2168.5	2023.3	1891.2	1778.5	1696.6	1657.2	1655.7
12.5°	2592.4	2535.3	2378.5	2190.1	1998.6	1790.8	1594.7	1419.4	1297.4	1239.5	1237.1
15°	2601.7	2521.4	2314.4	2065.0	1800.1	1506.7	1226.3	1006.2	895.0	857.2	857.2
17.5°	2600.9	2498.2	2240.3	1919.8	1564.6	1171.5	837.1	701.2	690.4	725.1	730.5
20°	2585.5	2461.2	2144.5	1747.6	1288.1	810.9	567.6	548.3	634.8	730.5	741.4
22.5°	2561.6	2413.3	2034.1	1547.6	966.1	528.2	437.9	467.2	584.6	703.5	720.5
25°	2528.3	2355.4	1907.5	1315.1	642.5	379.9	365.3	401.6	484.2	563.7	576.1
27.5°	2479.7	2282.0	1769.2	1063.4	410.1	312.8	318.2	343.7	379.2	413.2	420.1
30°	2418.7	2196.3	1618.6	784.6	311.2	279.6	288.8	304.3	319.7	341.3	346.0
32.5°	2356.9	2109.0	1461.9	539.0	271.8	261.8	271.1	279.6	292.7	307.4	310.4
35°	2301.3	2027.9	1300.5	376.1	254.8	250.2	254.8	260.2	273.4	288.0	289.6
37.5°	2261.1	1961.5	1132.1	297.3	244.8	240.2	242.5	244.8	260.2	281.9	284.2
40°	2255.7	1917.5	961.5	267.2	237.1	230.9	229.4	230.9	251.0	275.7	278.0
42.5°	2308.3	1919.8	794.6	254.8	230.9	224.0	217.8	220.9	238.6	257.9	259.5
45°	2432.6	1973.9	650.2	249.4	225.5	220.1	210.8	212.4	220.9	230.9	232.4
47.5°	2651.9	2092.0	539.8	246.3	220.9	216.2	204.6	200.0	200.8	206.2	206.2
50°	3002.5	2289.7	472.6	243.3	217.0	208.5	195.4	186.1	183.8	186.9	187.7
52.5°	3525.3	2628.7	440.2	237.1	210.1	198.5	183.8	174.5	170.7	173.8	173.8
55°	4231.9	3170.1	424.7	228.6	201.6	186.1	173.0	165.3	162.2	164.5	164.5
57.5°	5037.4	3873.6	451.0	217.0	190.7	173.0	163.7	158.3	156.0	158.3	159.1
60°	5994.2	4794.1	631.7	202.3	179.2	161.4	156.0	152.9	151.4	153.7	153.7
62.5°	7266.1	6018.9	977.7	190.7	166.8	150.6	149.0	147.5	146.0	148.3	148.3
65°	8639.2	7133.3	1006.2	183.8	156.0	141.3	142.1	142.1	140.5	142.9	142.9
67.5°	9076.2	7036.7	562.2	175.3	142.9	132.1	135.1	135.1	134.4	136.7	135.9
68°	8983.6	6883.8	489.6	173.0	140.5	129.7	132.8	133.6	132.8	135.1	134.4
70°	8293.2	6043.6	322.0	159.9	130.5	122.0	126.6	127.4	126.6	129.7	129.0
72.5°	6846.0	4533.1	237.9	139.8	118.2	112.0	116.6	117.4	118.2	121.2	120.5
75°	4347.8	2503.6	187.7	118.9	105.8	100.4	105.0	107.3	108.9	113.5	111.2
77.5°	1190.8	759.9	152.1	101.2	91.1	88.8	91.9	95.0	96.5	101.9	98.1
80°	417.0	335.9	126.6	85.7	75.7	74.9	78.0	81.1	82.6	87.3	82.6
82.5°	253.3	219.3	101.2	67.2	59.5	58.7	62.6	65.6	67.2	67.2	64.1
85°	132.1	115.8	74.1	47.1	40.9	38.6	45.6	49.4	50.2	49.4	47.1
87.5°	74.1	65.6	39.4	22.4	18.5	19.3	23.9	29.3	31.7	30.9	29.3
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)