

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: P198678

Luminaire Tested: **XNV-AF-01-LED-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198678
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: XNV-AF-01-LED-U-AFL
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6338.2 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 58
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

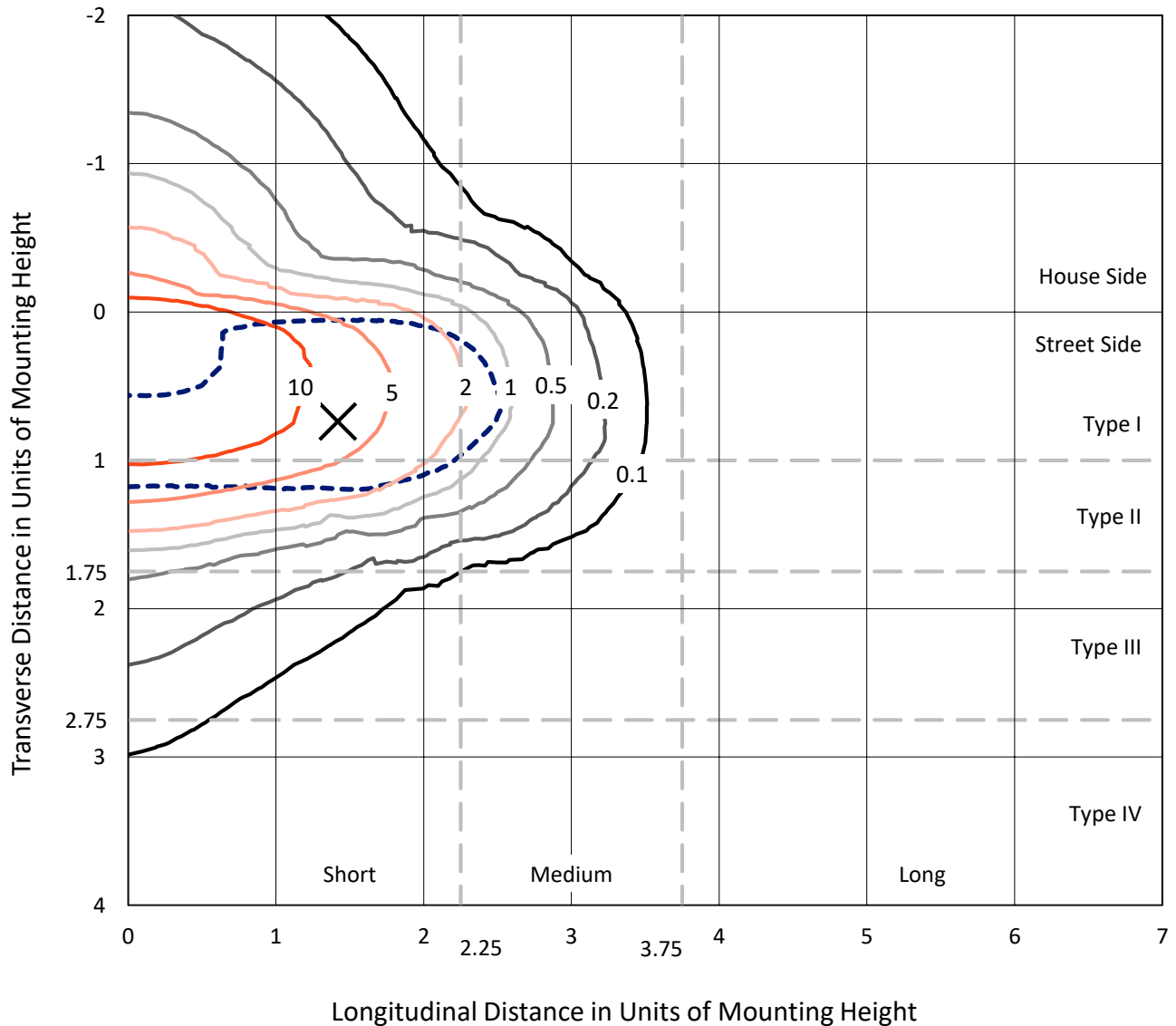


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

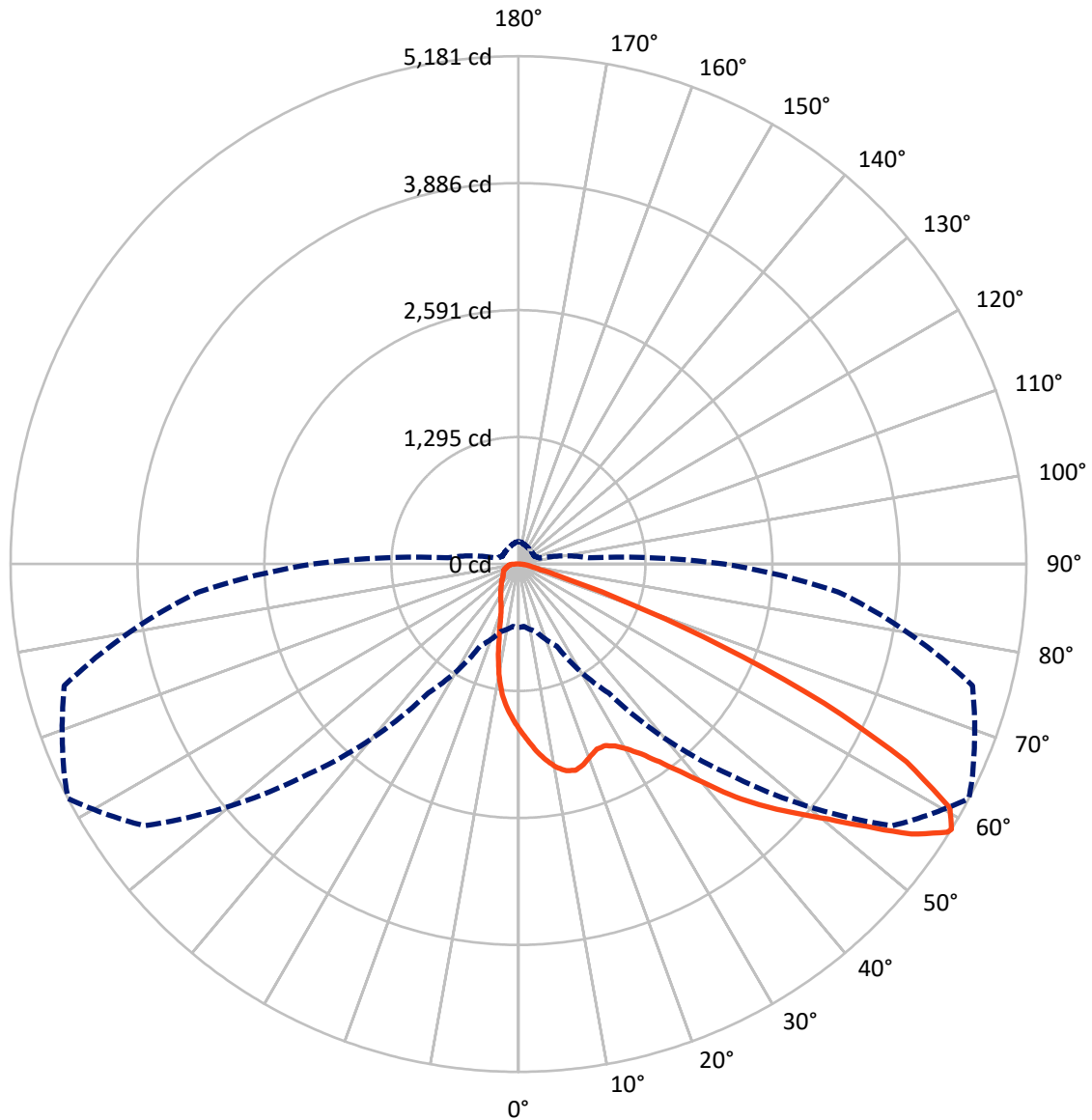


Based on 10 foot mounting height. Maximum calculated value = 19.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	973.2	0.0	973.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	5365.1	0.0	5365.1
	% Fixture	84.6	0.0	84.6
Total	Lumens	6338.2	0.0	6338.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	2.4
10°-20°	381.7	6.0
20°-30°	618.7	9.8
30°-40°	987.7	15.6
40°-50°	1436.7	22.7
50°-60°	1503.4	23.7
60°-70°	916.5	14.5
70°-80°	256.3	4.0
80°-90°	85.9	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°	6338.2	100.0
0°-180°	6338.2	100.0

Coefficient of Utilization



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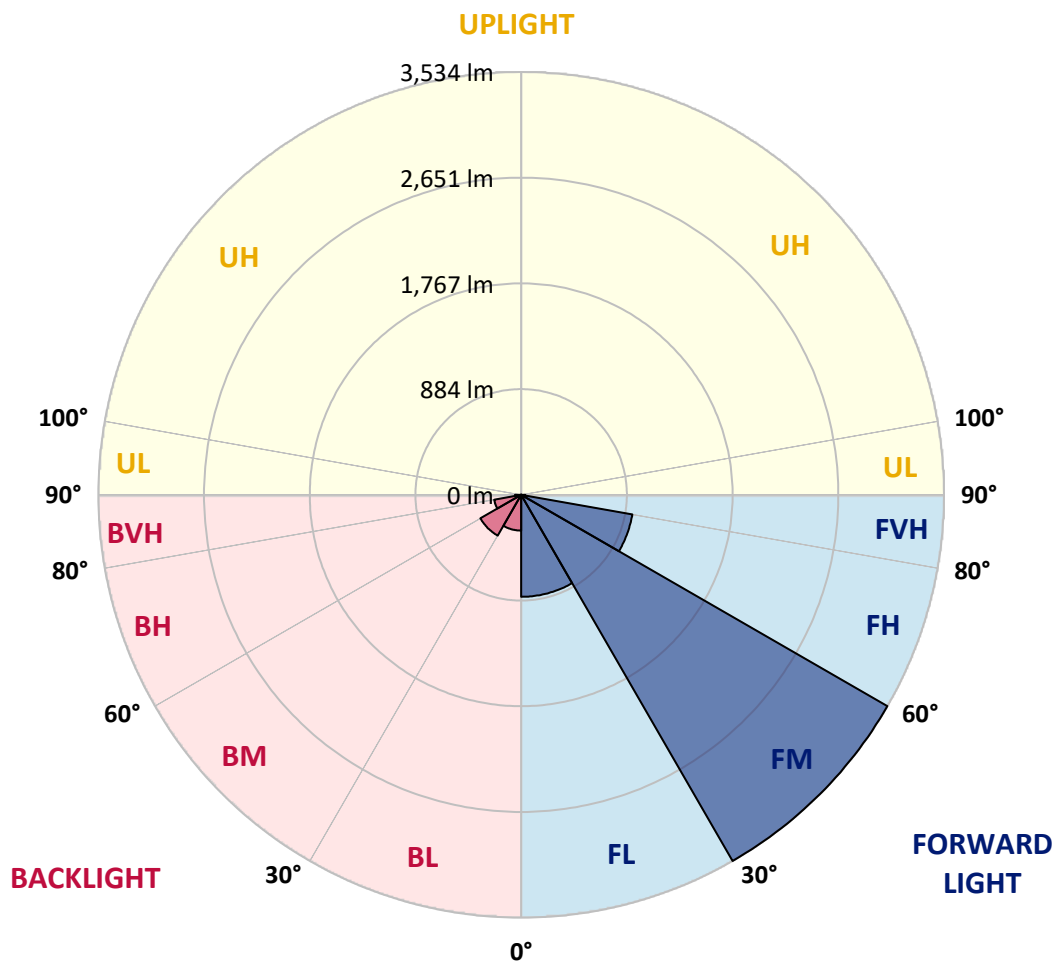
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	852.5	13.5			
FM	(30°-60°)	3534.3	55.8			
FH	(60°-80°)	943.7	14.9			G1/1800
FVH	(80°-90°)	34.6	0.5			G1/100
BL	(0°-30°)	299.2	4.7	B1/500		
BM	(30°-60°)	393.6	6.2	B1/1000		
BH	(60°-80°)	229.1	3.6	B1/500		G1/500
BVH	(80°-90°)	51.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3
2.5°	1920.8	1919.7	1903.4	1892.7	1880.0	1850.7	1821.4	1799.6	1788.5	1746.2	1705.0
5°	2079.7	2075.0	2065.8	2054.3	2037.7	2000.9	1954.4	1914.5	1898.6	1823.4	1747.7
7.5°	1995.7	2003.2	2031.4	2063.0	2096.3	2098.7	2065.8	2018.3	2000.9	1900.2	1789.3
10°	1763.2	1760.0	1795.3	1857.1	1966.7	2075.4	2129.6	2106.3	2087.9	1973.1	1830.9
12.5°	1692.7	1691.9	1697.8	1713.6	1782.6	1931.5	2113.3	2164.1	2157.7	2050.4	1875.3
15°	1714.1	1714.9	1714.5	1716.4	1735.4	1806.3	2022.6	2183.5	2203.2	2126.8	1920.4
17.5°	1782.6	1779.8	1771.1	1761.6	1764.4	1789.8	1924.8	2150.1	2209.6	2194.9	1958.4
20°	1888.4	1888.4	1864.9	1838.4	1821.0	1826.6	1884.0	2093.2	2180.3	2252.7	1987.0
22.5°	2021.0	2023.0	1988.5	1940.2	1900.6	1885.6	1907.4	2050.7	2144.6	2306.2	2012.3
25°	2185.8	2185.4	2135.1	2065.8	2003.2	1967.1	1966.7	2052.8	2133.6	2368.8	2038.8
27.5°	2389.8	2371.2	2312.6	2214.0	2125.6	2070.6	2045.6	2102.7	2156.9	2445.7	2074.5
30°	2620.0	2601.0	2524.1	2397.4	2277.7	2197.3	2156.1	2189.0	2228.2	2543.6	2128.4
32.5°	2847.8	2852.1	2761.8	2618.8	2465.1	2351.8	2290.8	2311.1	2338.4	2663.2	2201.3
35°	3181.3	3180.9	3062.8	2884.2	2701.6	2544.7	2467.5	2478.2	2503.2	2831.9	2303.5
37.5°	3430.1	3426.1	3350.1	3192.0	2986.4	2798.3	2686.6	2688.1	2709.5	3043.9	2438.2
40°	3455.4	3454.6	3454.2	3431.7	3291.0	3113.6	2973.7	2944.8	2953.6	3268.8	2581.2
42.5°	3261.7	3290.6	3373.8	3501.4	3540.6	3447.5	3315.2	3250.6	3231.6	3527.1	2732.5
45°	2985.6	3000.3	3146.1	3432.8	3666.2	3761.2	3661.9	3525.5	3493.1	3778.3	2855.7
47.5°	2857.3	2851.0	2935.4	3247.9	3653.9	4010.8	4017.9	3794.5	3739.5	3994.9	2960.6
50°	2581.9	2573.6	2680.2	2975.8	3520.0	4134.8	4383.5	4087.6	3985.8	4201.0	3055.8
52.5°	2033.3	2025.4	2168.5	2549.1	3220.6	4088.4	4691.8	4447.3	4273.8	4399.4	3144.4
55°	1323.1	1323.9	1460.2	1852.7	2606.2	3818.3	4836.3	4862.9	4668.3	4597.9	3216.2
57.5°	728.4	721.8	818.8	1060.1	1792.9	3204.7	4715.9	5162.3	5060.9	4768.2	3268.0
58°	647.6	639.8	714.6	922.6	1607.5	3031.6	4655.3	5181.3	5111.3	4796.3	3275.6
60°	461.5	448.1	436.5	520.1	926.2	2185.8	4251.3	5058.2	5125.9	4852.6	3268.4
62.5°	389.0	373.6	332.4	329.2	436.2	1069.2	3361.9	4442.2	4631.9	4723.1	3153.6
65°	361.3	345.9	291.5	272.1	295.9	461.5	2078.8	3430.1	3683.5	4272.7	2864.4
67.5°	341.5	323.3	265.0	239.7	244.4	276.1	882.2	2243.2	2537.2	3331.9	2298.0
70°	323.7	303.4	244.0	214.7	210.7	209.9	344.6	1171.4	1454.5	2180.3	1539.3
72.5°	303.4	283.7	225.4	194.1	185.4	170.3	207.1	484.1	663.5	1068.8	705.5
75°	274.2	257.9	204.8	177.1	162.0	138.2	152.9	232.1	286.0	409.2	327.5
77.5°	241.2	228.2	183.8	162.9	142.6	112.9	116.8	157.2	176.7	230.6	189.8
80°	170.7	175.4	160.4	143.4	125.6	91.1	89.9	115.3	126.7	154.9	127.6
82.5°	117.6	121.2	130.7	113.3	101.4	70.9	66.2	80.0	85.9	93.5	61.8
85°	84.0	81.6	90.7	81.2	74.5	45.1	42.4	50.7	54.3	57.1	29.7
87.5°	51.1	50.7	52.3	41.9	38.8	23.0	21.0	24.1	25.8	25.0	14.2
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°	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3	1692.3
2.5°	1689.5	1670.1	1627.7	1593.7	1556.8	1528.7	1500.6	1484.7	1467.2	1457.4	1456.2
5°	1708.1	1668.5	1578.2	1494.2	1407.9	1330.2	1254.1	1197.9	1151.9	1125.8	1124.2
7.5°	1728.7	1666.5	1527.1	1381.7	1228.0	1075.1	940.0	844.5	783.2	754.6	752.7
10°	1744.5	1658.2	1464.9	1238.7	995.0	793.1	670.2	614.0	595.4	590.7	589.8
12.5°	1763.6	1652.3	1386.4	1055.3	760.6	603.7	566.5	562.9	566.8	569.3	569.7
15°	1781.4	1640.8	1280.6	852.1	595.4	539.5	540.3	547.9	555.8	559.3	559.8
17.5°	1789.8	1612.7	1141.6	671.5	520.9	510.7	519.8	529.6	536.7	539.5	539.5
20°	1789.8	1567.5	980.4	543.9	482.1	484.1	495.2	502.7	504.3	501.9	500.7
22.5°	1782.2	1511.6	823.6	474.5	450.4	457.9	466.7	461.5	442.8	428.6	425.9
25°	1775.4	1445.4	672.6	432.2	422.7	432.6	429.0	393.7	365.2	350.6	348.2
27.5°	1764.4	1365.4	546.7	397.3	395.8	403.7	368.4	334.3	320.1	312.1	310.6
30°	1761.6	1278.7	457.6	366.4	369.2	358.1	317.7	306.6	303.4	299.1	297.1
32.5°	1770.7	1191.9	401.7	341.1	343.8	307.4	292.0	293.5	293.2	287.6	285.6
35°	1795.7	1107.5	366.0	318.1	310.2	275.3	277.3	282.0	282.0	275.3	272.9
37.5°	1839.3	1029.2	343.4	298.7	271.4	258.7	263.8	270.2	270.2	265.5	263.4
40°	1885.6	952.7	326.4	283.3	246.8	247.1	252.4	257.1	259.1	259.8	258.3
42.5°	1927.5	873.5	308.2	266.6	235.7	238.4	240.8	244.4	252.8	258.3	257.5
45°	1952.1	793.8	288.4	246.0	228.2	229.3	228.5	234.9	244.8	253.1	253.1
47.5°	1974.7	728.4	272.1	225.4	220.7	220.7	218.3	224.6	233.7	243.7	244.4
50°	1996.1	686.1	260.6	209.6	211.1	209.9	209.2	215.1	227.4	239.3	241.2
52.5°	2017.9	671.9	250.3	198.0	201.2	199.7	200.4	208.8	222.6	234.9	236.9
55°	2048.4	681.0	239.7	190.2	191.7	191.3	194.5	204.0	216.3	228.5	229.3
57.5°	2086.0	714.2	230.6	184.2	182.6	184.9	190.2	199.3	211.1	225.8	227.0
58°	2093.6	722.1	228.9	182.6	180.7	184.2	189.3	198.0	210.3	225.8	227.0
60°	2105.0	750.2	225.0	179.4	173.9	180.2	186.6	195.3	208.8	227.8	230.2
62.5°	2049.6	755.9	223.8	175.8	166.7	174.7	182.2	192.1	207.1	234.5	239.7
65°	1857.5	698.8	215.5	169.9	160.8	170.3	178.3	189.8	212.0	254.7	257.1
67.5°	1491.1	580.3	195.3	160.8	154.1	165.2	175.1	189.8	213.9	257.9	259.4
70°	1025.2	436.2	169.9	150.9	146.2	158.9	173.9	194.1	207.1	244.0	239.3
72.5°	535.5	303.4	148.9	139.4	136.7	153.3	185.4	189.8	199.3	227.8	223.0
75°	269.8	206.4	131.1	126.3	125.9	151.3	207.6	182.6	190.9	214.3	224.6
77.5°	159.3	161.6	116.8	114.1	116.1	147.7	208.0	175.4	181.5	197.2	208.4
80°	108.9	133.5	105.8	105.0	106.6	135.8	191.7	166.7	170.3	186.6	198.5
82.5°	61.4	73.7	92.7	97.8	97.1	111.3	165.6	151.7	156.1	220.7	233.3
85°	29.7	44.4	77.6	91.6	82.8	74.1	134.7	134.7	135.8	158.0	160.0
87.5°	11.0	19.8	52.3	72.5	57.8	44.4	91.6	95.4	106.2	109.4	111.7
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)