

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: P271297

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
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-AFL-7027-800-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7104.9 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 85
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

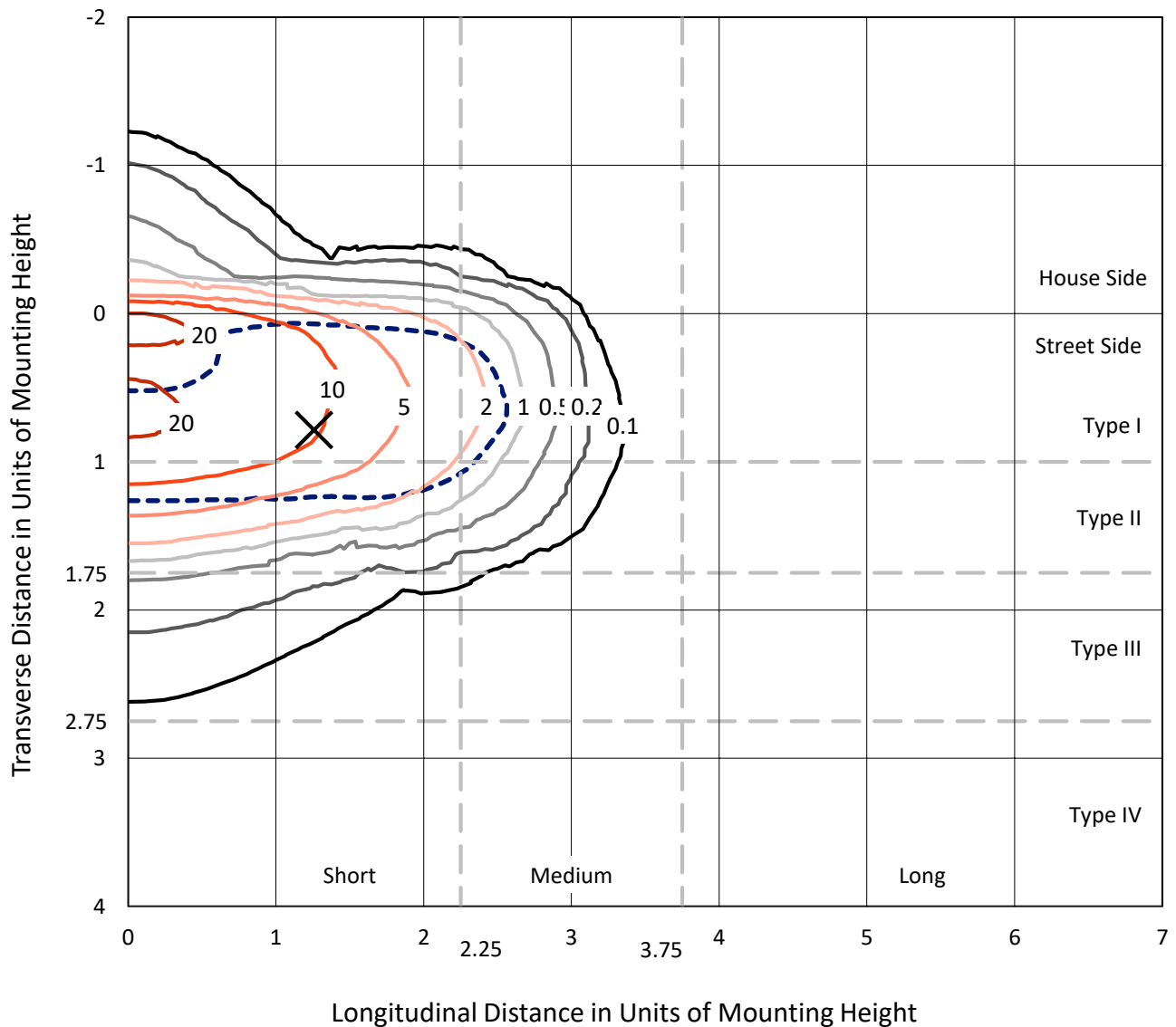


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

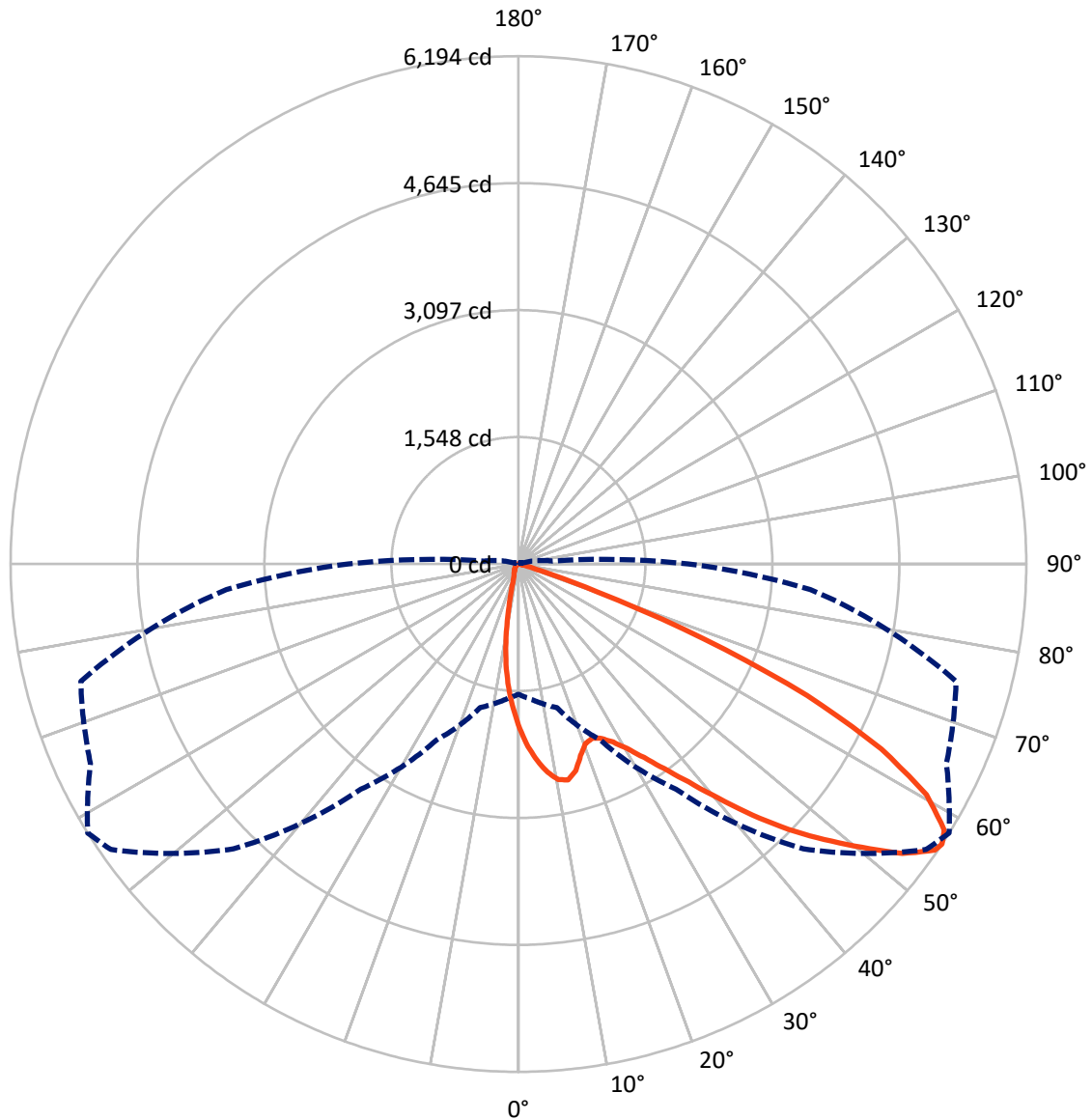


Based on 10 foot mounting height. Maximum calculated value = 25 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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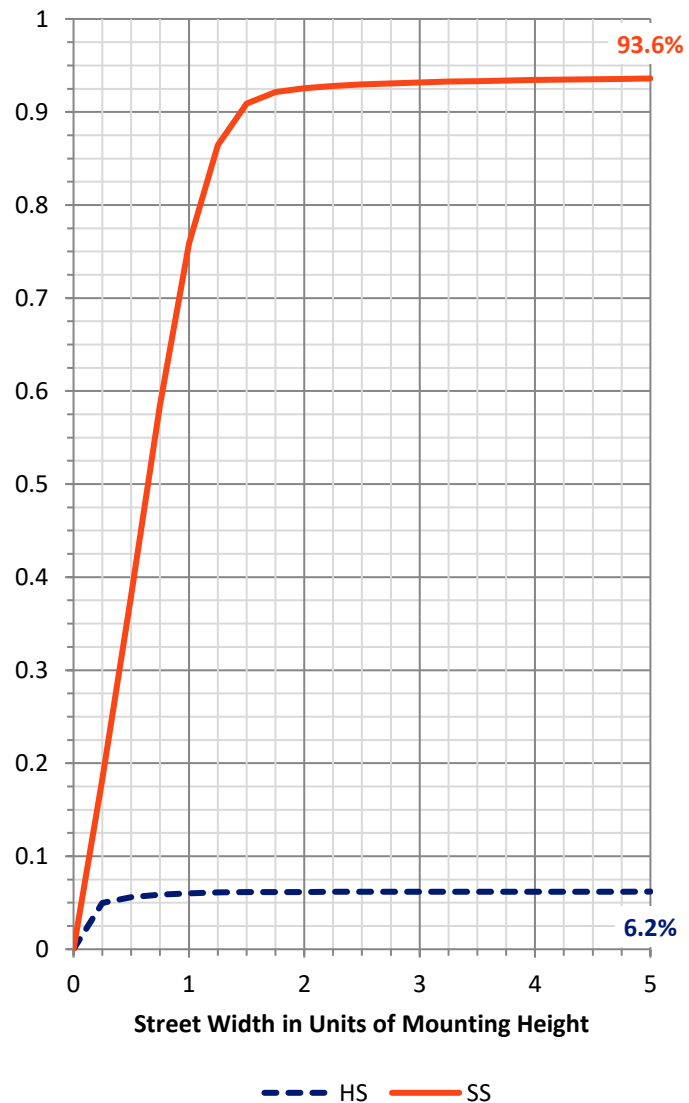
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	443.5	0.0	443.5
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	6661.4	0.0	6661.4
	% Fixture	93.8	0.0	93.8
Total	Lumens	7104.9	0.0	7104.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.6	2.4
10°-20°	399.3	5.6
20°-30°	671.9	9.5
30°-40°	1150.5	16.2
40°-50°	1736.2	24.4
50°-60°	1804.7	25.4
60°-70°	1013.1	14.3
70°-80°	138.8	2.0
80°-90°	18.8	0.3
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°	7104.9	100.0
0°-180°	7104.9	100.0

Coefficient of Utilization



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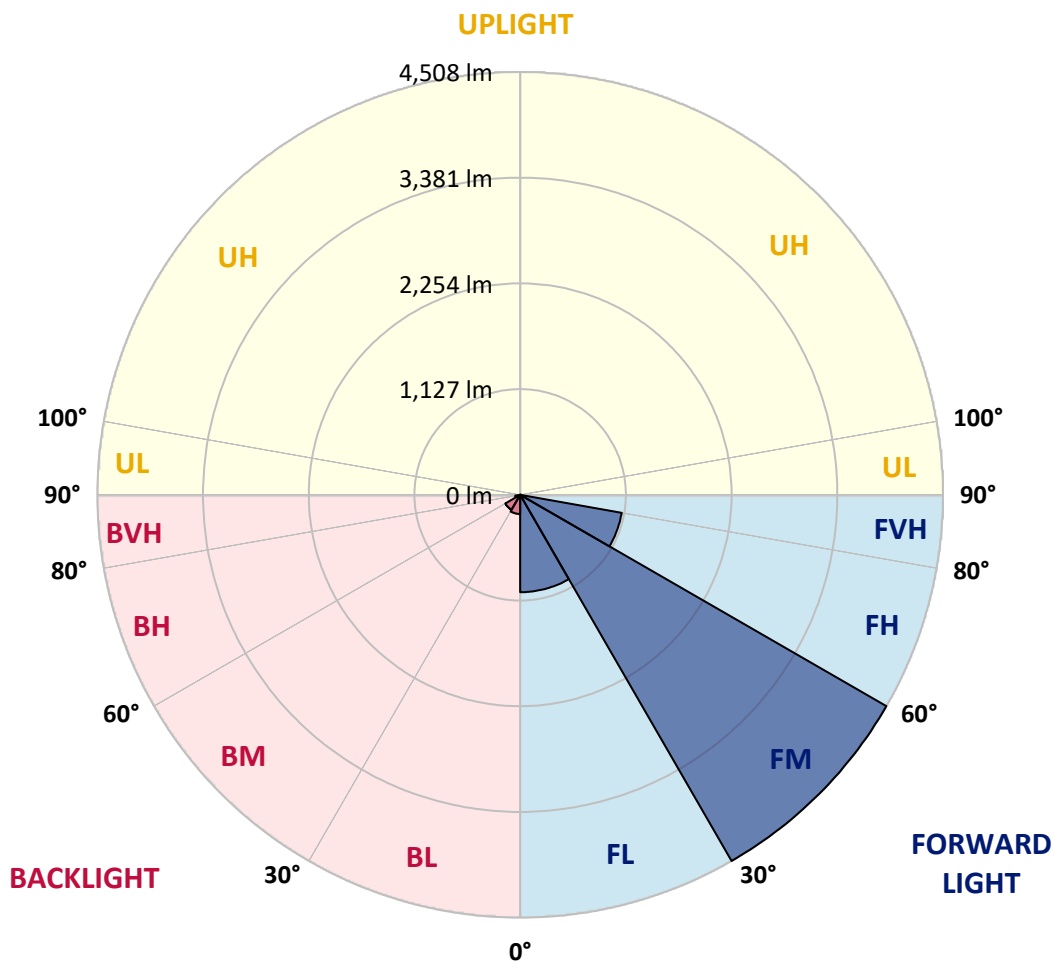
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1038.2	14.6			
FM	(30°-60°)	4507.7	63.4			
FH	(60°-80°)	1099.4	15.5			G1/1800
FVH	(80°-90°)	16.2	0.2			G1/100
BL	(0°-30°)	204.6	2.9	B1/500		
BM	(30°-60°)	183.7	2.6	B0/220		
BH	(60°-80°)	52.6	0.7	B0/110		G0/110
BVH	(80°-90°)	2.6	0.0			G0/10
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°	58°	65°	75°	85°
0°	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7
2.5°	2420.4	2405.8	2390.5	2362.4	2336.3	2296.2	2240.9	2227.3	2184.0	2112.5	2045.8
5°	2629.0	2626.4	2616.0	2593.2	2565.1	2516.3	2454.0	2412.2	2344.9	2232.3	2103.8
7.5°	2505.5	2528.2	2565.6	2618.7	2654.5	2649.6	2601.9	2565.6	2498.9	2344.9	2160.8
10°	2111.9	2116.2	2167.7	2279.4	2456.1	2621.0	2683.2	2673.4	2612.2	2443.7	2210.5
12.5°	1973.1	1975.8	1987.8	2023.5	2138.4	2368.3	2650.7	2701.7	2696.8	2538.0	2263.6
15°	1983.9	1985.7	1988.8	2000.3	2032.8	2148.2	2485.9	2615.4	2751.0	2627.5	2315.7
17.5°	2069.7	2068.5	2058.2	2047.3	2057.7	2095.7	2317.8	2454.4	2739.7	2702.8	2358.6
20°	2236.6	2242.0	2207.3	2159.0	2134.2	2135.8	2235.0	2337.4	2675.6	2761.3	2390.5
22.5°	2471.2	2475.1	2418.1	2334.7	2261.6	2224.7	2252.3	2306.5	2601.9	2815.5	2416.5
25°	2751.6	2751.6	2671.9	2553.2	2439.8	2359.0	2335.2	2355.8	2573.7	2876.7	2442.6
27.5°	3054.0	3064.8	2960.9	2805.1	2655.6	2537.4	2462.7	2458.8	2595.5	2953.7	2471.9
30°	3383.0	3392.8	3269.2	3079.0	2901.7	2750.5	2635.5	2610.7	2678.3	3057.3	2514.6
32.5°	3710.4	3718.7	3582.0	3388.0	3181.3	3003.7	2852.4	2812.9	2827.4	3208.6	2577.5
35°	4126.8	4128.4	3955.4	3724.6	3504.0	3295.3	3104.0	3064.8	3048.6	3399.4	2668.1
37.5°	4458.0	4445.0	4335.5	4117.0	3863.9	3646.0	3421.0	3370.0	3331.1	3667.7	2808.6
40°	4536.0	4536.0	4519.8	4454.2	4253.0	4043.4	3825.4	3749.4	3663.3	3983.7	2997.1
42.5°	4332.7	4345.8	4453.1	4595.6	4597.3	4462.9	4249.8	4185.8	4034.1	4343.7	3203.0
45°	3878.0	3881.8	4139.3	4524.1	4785.5	4862.3	4705.2	4616.7	4406.5	4717.7	3391.7
47.5°	3714.2	3726.2	3835.8	4306.3	4799.6	5185.9	5142.1	5020.6	4751.2	5059.2	3567.9
50°	3462.7	3477.3	3611.2	3985.3	4672.7	5393.7	5560.0	5430.0	5065.2	5343.7	3655.2
52.5°	2861.0	2883.7	3073.0	3560.8	4355.5	5402.2	5942.6	5864.7	5386.5	5496.1	3645.0
55°	1968.7	1985.7	2206.2	2779.7	3715.8	5137.1	6107.4	6161.1	5673.3	5530.1	3594.9
56°	1588.3	1651.2	1812.7	2368.3	3351.7	4911.8	6069.6	6193.8	5758.4	5524.8	3573.4
57.5°	1049.9	1061.9	1238.0	1716.2	2691.4	4422.3	5898.4	6124.4	5867.9	5497.2	3557.6
60°	493.8	499.3	562.7	791.9	1456.5	3222.6	5341.5	5716.6	5908.1	5439.1	3557.1
62.5°	322.0	323.1	330.7	377.8	595.8	1755.2	4428.1	4968.0	5575.7	5432.6	3546.8
65°	265.1	267.8	258.5	264.6	311.7	662.0	3123.3	3873.1	4795.7	5279.8	3430.7
67.5°	233.6	234.2	221.7	214.7	228.2	290.5	1573.7	2443.1	3586.9	4486.1	2825.8
70°	213.1	212.4	198.3	182.1	182.6	193.0	512.8	1014.7	1984.5	2663.7	1622.3
72.5°	189.3	190.4	182.1	159.4	151.8	136.6	193.0	273.8	675.4	855.4	427.8
75°	165.8	163.8	155.5	140.9	126.8	91.5	97.0	116.5	176.2	174.5	92.2
77.5°	125.8	123.5	127.4	120.4	99.3	64.0	53.1	60.7	79.7	74.3	37.4
80°	95.9	95.0	86.7	102.9	90.5	48.2	36.3	37.4	43.4	39.5	18.4
82.5°	69.3	68.8	65.5	63.4	57.4	35.3	27.7	29.3	32.5	27.7	13.6
85°	26.6	26.6	51.6	43.4	39.5	23.9	19.6	21.1	25.0	20.0	9.3
87.5°	4.3	4.3	34.7	28.7	17.8	11.9	12.4	13.6	14.6	11.9	7.0
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°	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7	2011.7
2.5°	2006.3	1970.0	1890.3	1813.1	1746.0	1672.3	1634.8	1591.4	1575.3	1542.7	1546.1
5°	2026.8	1950.8	1791.0	1622.3	1467.9	1310.7	1199.1	1093.9	1035.3	977.4	977.4
7.5°	2048.0	1932.0	1684.7	1415.4	1155.1	885.8	694.8	542.0	457.0	400.0	398.4
10°	2062.6	1907.6	1563.9	1175.3	791.4	456.3	275.4	216.9	195.7	186.5	185.9
12.5°	2081.6	1883.1	1426.1	892.2	439.6	216.9	171.8	162.7	158.8	156.7	156.7
15°	2097.8	1848.4	1259.2	600.1	231.0	162.7	148.0	144.7	144.2	143.6	144.2
17.5°	2101.7	1799.1	1059.2	351.2	167.5	142.0	135.6	132.8	132.8	132.3	132.3
20°	2093.0	1734.1	838.1	216.9	144.7	130.7	123.5	120.4	119.8	119.8	119.8
22.5°	2075.1	1651.2	619.7	164.2	131.7	120.4	111.1	107.8	107.8	108.4	109.0
25°	2052.8	1553.0	425.5	141.5	122.0	109.6	100.3	97.0	98.2	99.3	99.7
27.5°	2024.6	1435.9	278.7	122.4	109.0	98.6	90.5	88.4	90.5	92.6	93.8
30°	1996.5	1307.5	188.6	106.3	94.3	86.7	81.8	81.2	84.6	89.4	90.0
32.5°	1978.0	1175.7	142.7	95.4	83.0	76.4	74.3	75.4	80.2	85.7	86.7
35°	1976.5	1047.2	121.5	86.7	75.4	69.3	68.4	71.5	77.0	81.2	82.4
37.5°	2001.9	927.0	110.0	80.2	69.3	63.4	61.9	67.7	72.7	77.0	78.1
40°	2053.3	819.1	102.4	74.3	64.5	57.4	56.4	61.3	66.1	71.1	72.7
42.5°	2117.8	718.3	93.8	68.4	59.1	50.9	49.9	53.7	58.5	65.5	66.7
45°	2173.7	624.4	84.6	61.9	53.1	43.8	43.4	47.7	51.6	58.0	59.1
47.5°	2220.9	546.3	75.8	54.7	45.5	39.0	38.4	40.7	42.8	48.8	49.9
50°	2195.9	480.2	67.3	44.9	36.9	33.5	33.1	33.1	35.8	41.7	42.8
52.5°	2134.7	439.1	59.1	37.4	30.4	28.7	27.0	27.7	30.4	33.1	33.5
55°	2085.3	419.6	52.0	33.1	25.5	23.9	22.2	21.6	22.2	21.1	20.0
56°	2073.4	417.4	50.5	32.0	24.4	22.2	20.0	19.0	18.4	16.3	15.7
57.5°	2068.0	417.4	47.7	29.9	22.7	20.0	17.3	15.2	13.0	11.4	11.4
60°	2063.6	420.0	44.5	26.1	19.6	16.3	12.4	9.3	7.5	7.5	7.5
62.5°	2054.5	419.0	40.7	21.6	16.8	12.4	7.5	6.0	5.4	6.0	6.5
65°	1950.8	389.2	35.8	17.3	13.0	8.7	4.3	4.3	4.9	6.0	6.5
67.5°	1572.0	295.0	29.3	13.6	9.3	6.5	3.9	3.9	4.9	6.0	6.5
70°	863.5	155.5	25.0	9.7	7.0	5.4	3.9	3.2	4.9	6.0	6.5
72.5°	210.8	65.0	22.7	7.5	6.5	4.9	3.2	3.2	4.9	6.0	6.5
75°	52.0	48.8	18.4	6.0	5.4	4.3	3.2	3.2	4.9	6.0	6.5
77.5°	24.4	64.5	12.4	5.4	4.9	3.9	3.2	3.2	4.9	6.0	6.0
80°	14.6	48.8	7.5	4.9	4.3	3.9	3.2	3.2	4.9	6.0	6.5
82.5°	8.7	14.2	5.4	4.9	4.3	3.2	3.2	3.2	4.9	6.0	6.5
85°	7.5	7.0	5.4	4.9	4.3	3.9	3.2	3.2	5.4	6.5	6.5
87.5°	6.0	5.4	4.9	4.3	4.3	3.9	3.2	3.2	4.9	6.0	6.5
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)