

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: P270963

Luminaire Tested: **NVN-AF-04-LED-U-5MQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-04-LED-U-5MQ-7027-800
Description: NAVION ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18237.9 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 171
Input Voltage (V): NR
Input Current (A_{in}): 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

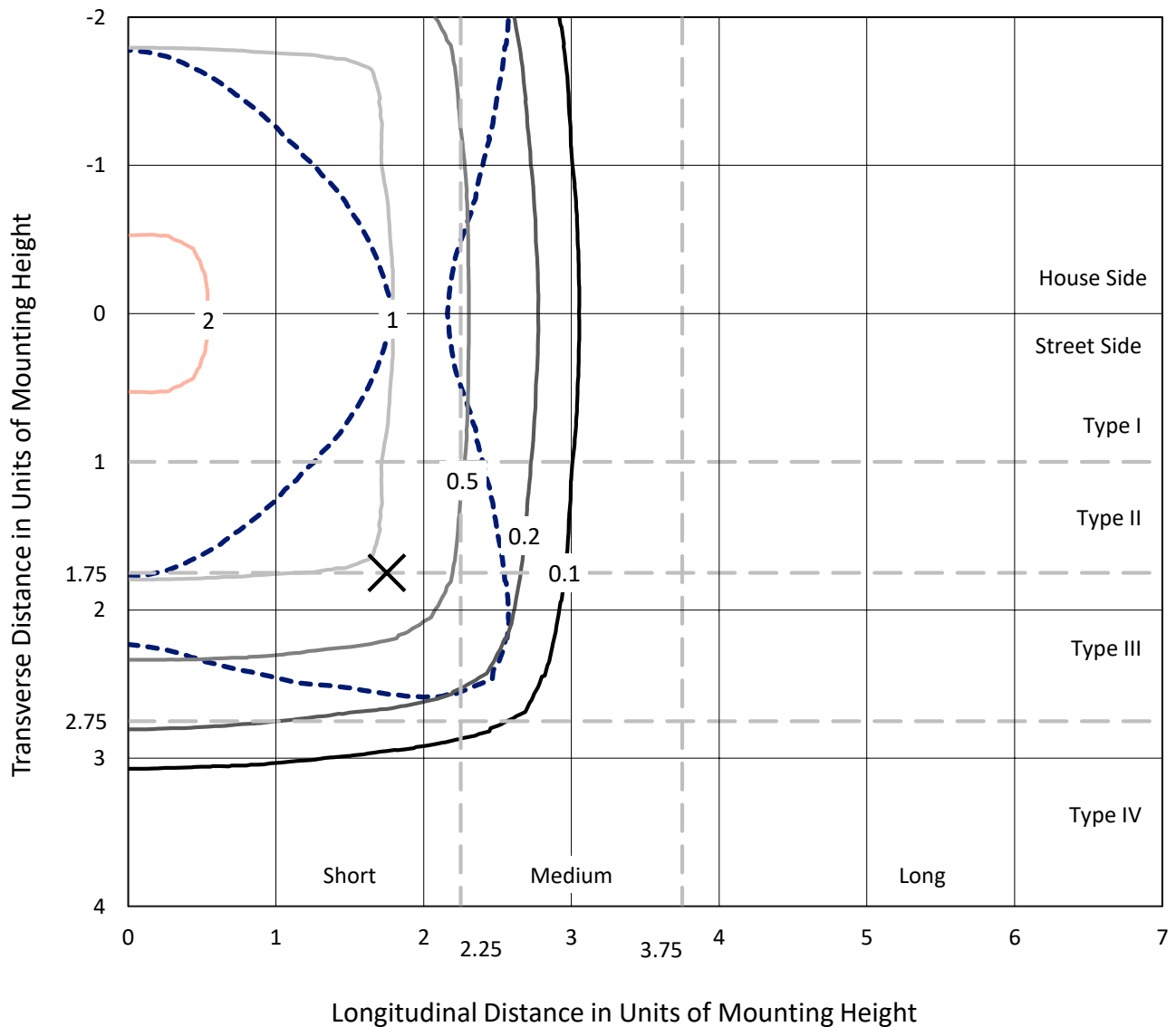


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Iso-Footcandle Lines of Horizontal Illumination

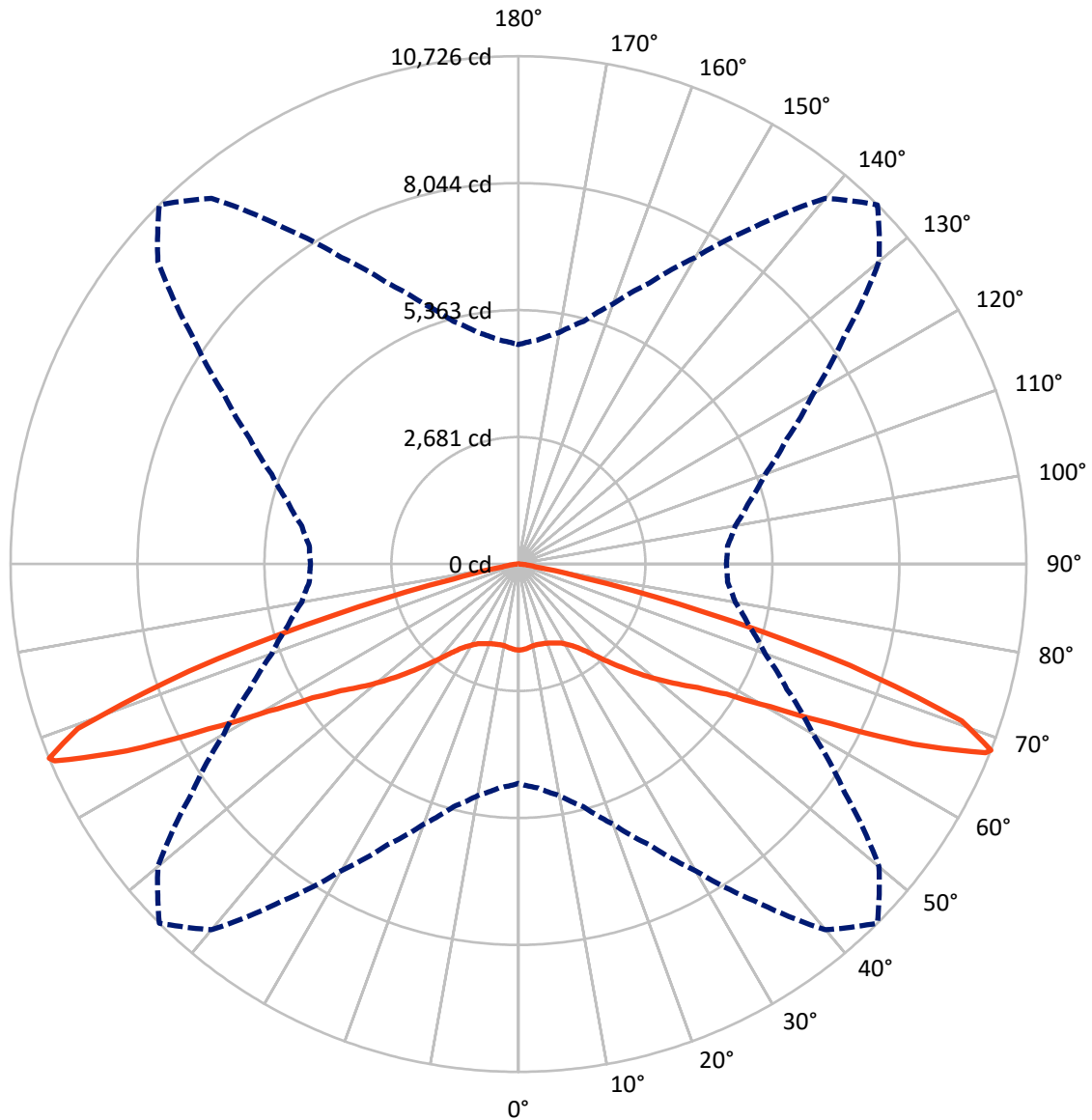
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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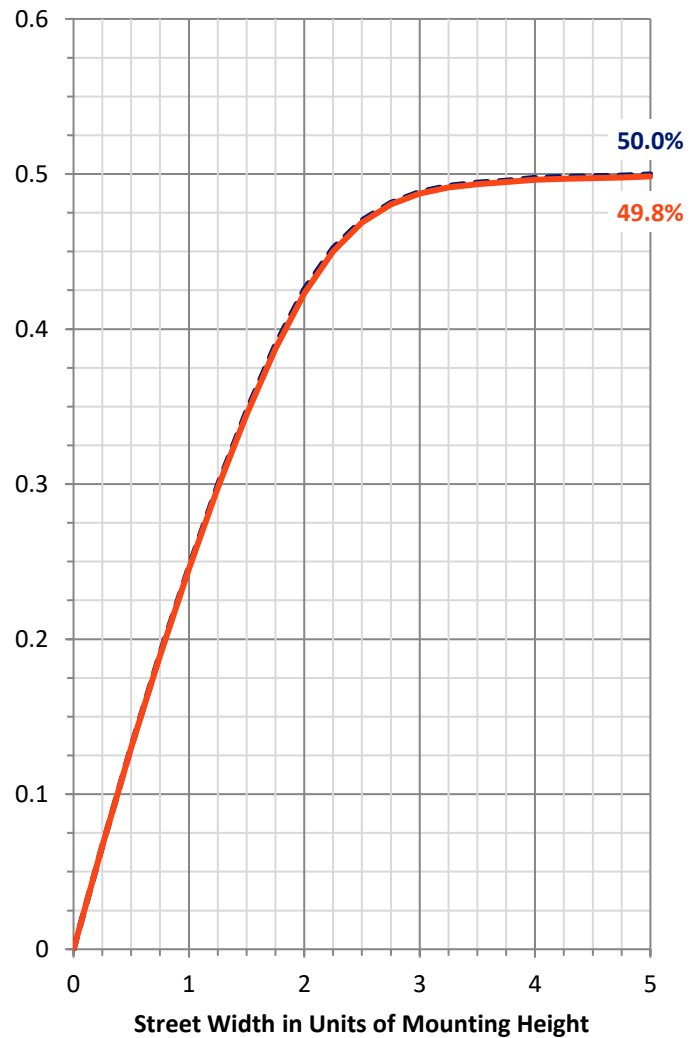
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9118.9	0.0	9118.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9118.9	0.0	9118.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	18237.9	0.0	18237.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	0.9
10°-20°	493.7	2.7
20°-30°	839.4	4.6
30°-40°	1373.6	7.5
40°-50°	2454.8	13.5
50°-60°	4145.8	22.7
60°-70°	6428.6	35.2
70°-80°	2210.3	12.1
80°-90°	121.5	0.7
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°	18237.9	100.0
0°-180°	18237.9	100.0



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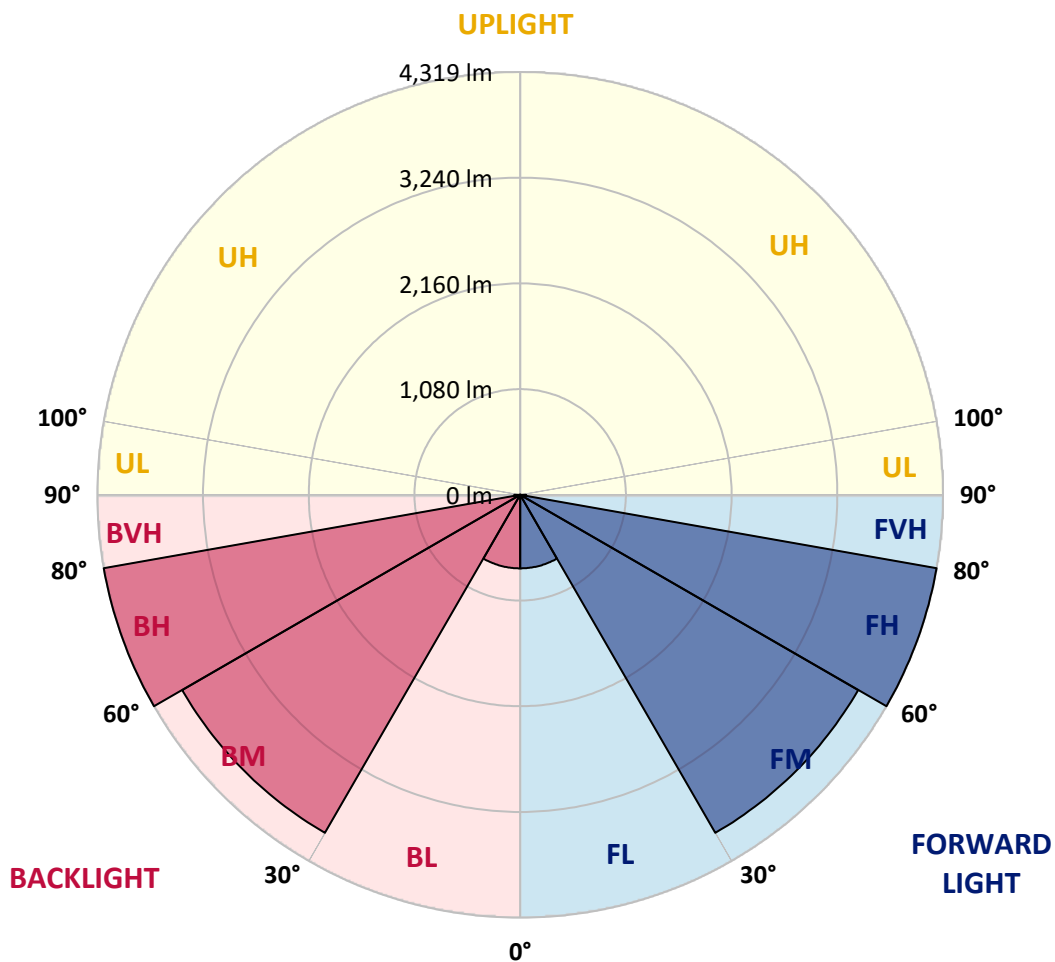
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	751.7	4.1			
FM	(30°-60°)	3987.1	21.9			
FH	(60°-80°)	4319.5	23.7			G2/5000
FVH	(80°-90°)	60.7	0.3			G1/100
BL	(0°-30°)	751.7	4.1	B2/1000		
BM	(30°-60°)	3987.1	21.9	B3/5000		
BH	(60°-80°)	4319.5	23.7	B4/5000		G2/5000
BVH	(80°-90°)	60.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2
2.5°	1827.2	1827.2	1829.4	1828.2	1824.8	1821.6	1818.2	1814.8	1812.6	1810.4	1808.1
5°	1808.1	1808.1	1811.4	1809.2	1807.0	1803.6	1801.5	1798.0	1795.8	1793.6	1794.8
7.5°	1783.6	1785.8	1787.9	1786.9	1782.4	1781.2	1777.9	1776.8	1774.6	1771.3	1772.4
10°	1762.4	1763.5	1765.7	1764.6	1763.5	1760.0	1759.1	1757.9	1756.7	1752.2	1751.2
12.5°	1741.2	1743.3	1745.5	1746.7	1745.5	1746.7	1747.8	1748.9	1747.8	1745.5	1745.5
15°	1724.3	1726.6	1730.0	1733.3	1734.4	1741.2	1745.5	1750.1	1753.4	1754.5	1751.2
17.5°	1715.5	1718.7	1723.3	1730.0	1735.5	1743.3	1751.2	1757.9	1763.5	1764.6	1761.1
20°	1714.2	1717.6	1724.3	1732.2	1742.3	1752.2	1764.6	1774.6	1780.3	1783.6	1780.3
22.5°	1722.1	1726.6	1735.5	1745.5	1757.9	1771.3	1786.9	1798.0	1809.2	1813.7	1810.4
25°	1744.5	1748.9	1759.1	1771.3	1784.7	1801.5	1817.0	1831.6	1842.8	1848.4	1843.9
27.5°	1791.4	1792.5	1803.6	1817.0	1832.7	1847.3	1867.2	1874.0	1882.9	1888.5	1882.9
30°	1857.2	1859.5	1869.6	1890.8	1905.2	1924.3	1935.4	1942.1	1952.1	1957.8	1951.1
32.5°	1957.8	1960.0	1968.9	1989.0	2002.4	2017.0	2030.3	2034.8	2044.9	2051.5	2043.7
35°	2099.6	2104.1	2111.8	2125.3	2136.4	2147.6	2157.6	2154.3	2161.1	2169.9	2162.1
37.5°	2293.9	2292.8	2295.0	2305.1	2316.3	2322.9	2338.6	2330.8	2337.5	2345.4	2340.9
40°	2520.6	2520.6	2519.6	2537.4	2541.8	2548.5	2565.3	2555.3	2564.2	2573.1	2565.3
42.5°	2778.6	2783.0	2788.7	2803.3	2815.5	2817.8	2825.4	2821.0	2832.3	2840.0	2832.3
45°	3075.6	3082.4	3089.1	3122.6	3128.2	3132.7	3138.1	3123.8	3136.1	3142.7	3140.5
47.5°	3383.9	3396.2	3410.8	3445.4	3467.6	3477.8	3482.2	3465.4	3466.6	3476.6	3477.8
50°	3732.4	3745.8	3760.2	3799.4	3820.6	3838.5	3844.0	3825.1	3827.3	3835.1	3837.4
52.5°	4054.1	4069.6	4100.9	4153.5	4183.5	4214.8	4217.1	4193.6	4203.7	4209.3	4204.7
55°	4356.7	4376.8	4418.1	4488.4	4543.2	4604.6	4632.5	4606.9	4606.9	4602.3	4600.1
57.5°	4709.5	4731.9	4774.3	4855.9	4931.9	5020.1	5096.1	5121.6	5168.6	5184.2	5159.7
60°	5241.3	5264.6	5308.3	5415.4	5511.5	5639.9	5765.0	5866.7	6031.8	6121.2	6040.8
62.5°	5727.1	5762.7	5865.6	6053.0	6260.8	6498.7	6774.6	6971.1	7271.5	7421.2	7219.0
65°	5616.5	5689.1	5890.0	6184.9	6613.7	7129.7	7691.5	8230.9	8851.9	9170.1	8759.2
67.5°	4906.2	4967.5	5184.2	5527.1	6062.0	6773.5	7646.8	8763.7	10044.6	10641.0	9914.0
68°	4634.7	4749.8	4965.3	5306.0	5845.5	6544.5	7477.0	8683.1	10081.5	10725.9	9940.7
70°	3553.7	3594.9	3801.6	4107.6	4689.5	5375.2	6316.7	7691.5	9271.8	9935.2	9127.7
72.5°	1688.6	1713.2	1847.3	2148.7	2518.4	3076.9	3907.6	5204.3	6628.2	7318.4	6513.3
75°	618.8	624.3	655.6	727.1	865.5	1075.5	1474.2	2280.5	3376.1	4026.2	3389.6
77.5°	333.9	335.1	347.4	365.3	389.8	417.7	478.0	641.0	1034.2	1407.1	1092.2
80°	209.9	208.9	221.2	235.6	252.5	265.8	271.4	290.3	327.3	383.0	351.7
82.5°	107.2	117.3	145.2	160.8	185.4	189.8	184.3	183.2	194.4	209.9	216.6
85°	59.2	52.6	77.1	102.8	111.7	115.1	116.2	109.5	107.2	105.0	110.6
87.5°	30.2	27.8	33.4	51.4	54.7	44.6	45.9	39.0	26.8	26.8	27.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2	1819.2
2.5°	1806.0	1807.0	1804.8	1804.8	1804.8	1806.0	1804.8	1803.6
5°	1791.4	1793.6	1793.6	1794.8	1795.8	1795.8	1795.8	1795.8
7.5°	1770.1	1771.3	1773.6	1773.6	1773.6	1773.6	1773.6	1773.6
10°	1750.1	1747.8	1746.7	1744.5	1744.5	1741.2	1742.3	1743.3
12.5°	1739.9	1735.5	1733.3	1730.0	1727.7	1724.3	1724.3	1725.5
15°	1744.5	1737.7	1731.0	1728.8	1726.6	1724.3	1722.1	1723.3
17.5°	1753.4	1745.5	1737.7	1733.3	1728.8	1725.5	1724.3	1725.5
20°	1772.4	1761.1	1748.9	1741.2	1732.2	1730.0	1726.6	1730.0
22.5°	1798.0	1784.7	1769.0	1754.5	1744.5	1739.9	1735.5	1738.8
25°	1829.4	1814.8	1799.1	1782.4	1771.3	1768.0	1762.4	1762.4
27.5°	1872.8	1860.6	1847.3	1831.6	1820.3	1817.0	1808.1	1808.1
30°	1942.1	1929.9	1917.5	1904.1	1893.0	1889.7	1878.4	1878.4
32.5°	2033.8	2020.3	2012.6	2001.3	1992.4	1986.8	1973.3	1972.3
35°	2156.7	2144.3	2143.1	2135.4	2126.4	2127.5	2114.2	2111.8
37.5°	2333.0	2322.9	2326.3	2319.7	2311.8	2318.4	2310.7	2310.7
40°	2558.6	2555.3	2558.6	2554.2	2555.3	2556.3	2549.7	2551.9
42.5°	2831.1	2822.1	2842.2	2840.0	2836.7	2845.7	2830.0	2818.8
45°	3145.0	3141.6	3161.7	3165.1	3158.4	3163.9	3136.1	3134.8
47.5°	3485.6	3485.6	3503.4	3501.2	3494.4	3495.7	3462.1	3440.9
50°	3840.8	3838.5	3856.3	3851.9	3842.9	3841.8	3807.1	3785.9
52.5°	4210.4	4210.4	4236.0	4223.8	4202.6	4192.5	4150.1	4122.1
55°	4619.2	4613.5	4621.4	4581.1	4539.9	4509.8	4457.2	4436.0
57.5°	5136.1	5071.4	5015.5	4964.3	4906.2	4870.4	4808.9	4786.7
60°	5870.0	5696.8	5622.0	5519.2	5423.2	5375.2	5293.7	5250.1
62.5°	6886.2	6599.2	6396.0	6169.3	5950.4	5796.3	5672.3	5617.6
65°	8061.1	7435.7	6918.7	6432.9	6020.7	5693.5	5511.5	5454.5
67.5°	8507.8	7359.8	6467.4	5770.5	5270.3	4880.4	4662.7	4616.8
68°	8412.9	7185.5	6258.6	5545.0	5042.4	4649.3	4432.6	4391.4
70°	7421.2	6062.0	5083.7	4373.4	3904.4	3530.2	3377.3	3311.3
72.5°	5059.2	3893.3	2986.3	2388.9	2038.2	1801.5	1660.6	1612.6
75°	2328.5	1573.7	1050.8	785.1	666.7	609.8	566.2	555.1
77.5°	678.9	493.6	424.4	393.1	369.7	349.6	335.1	333.9
80°	322.8	302.6	293.7	273.7	252.5	233.4	220.1	222.2
82.5°	216.6	211.1	211.1	191.0	157.5	135.1	111.7	100.5
85°	115.1	119.6	126.2	119.6	103.8	77.1	50.2	54.7
87.5°	39.0	44.6	46.9	45.9	41.3	31.4	23.4	23.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)