

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: LUMARK

Report Number: P270651

Luminaire Tested: **NAV-AF-06-D-UNV-5WQ-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P270651  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-06-D-UNV-5WQ-7027-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26306.6 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G3

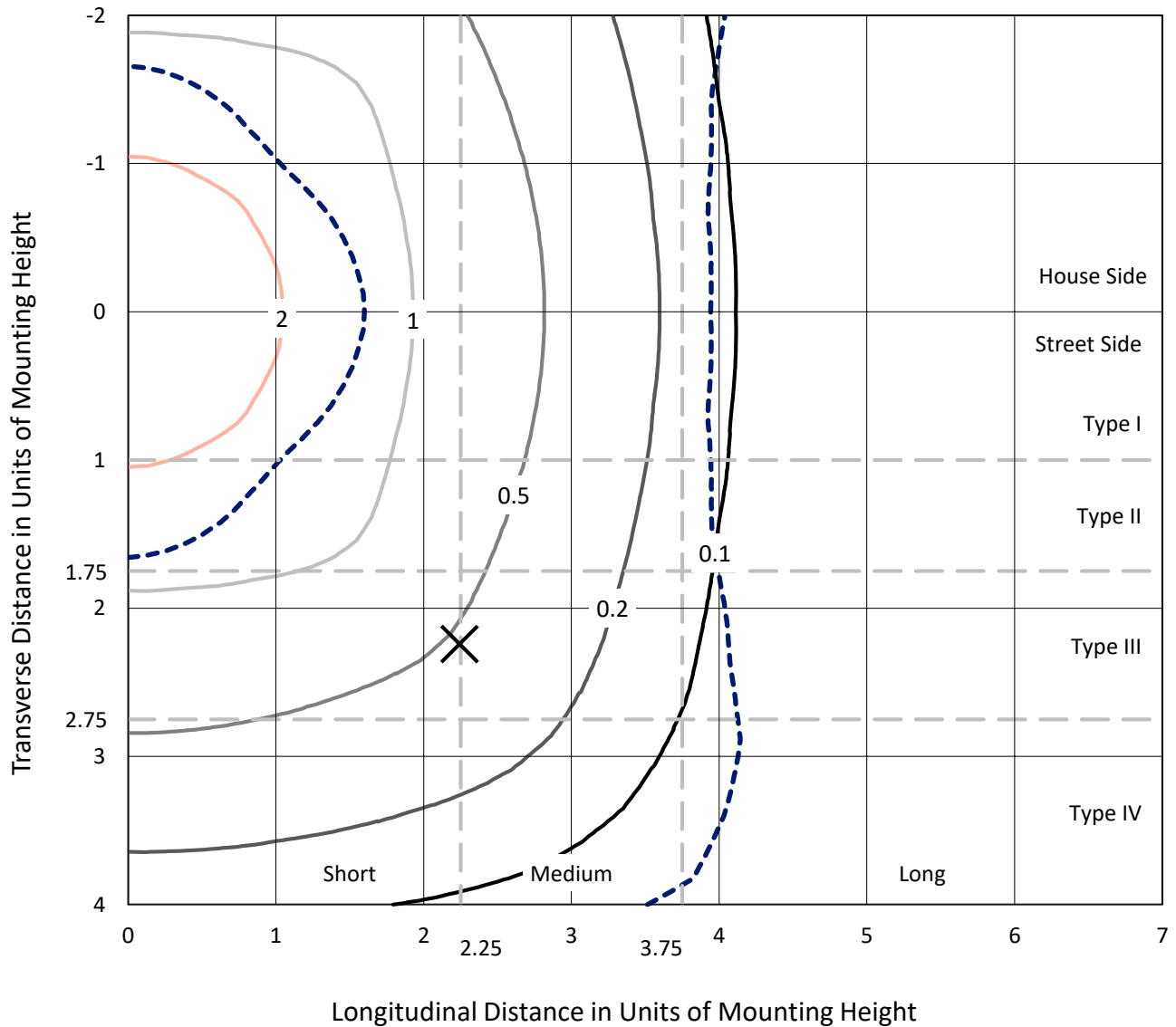
Input Watts (W): 249  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

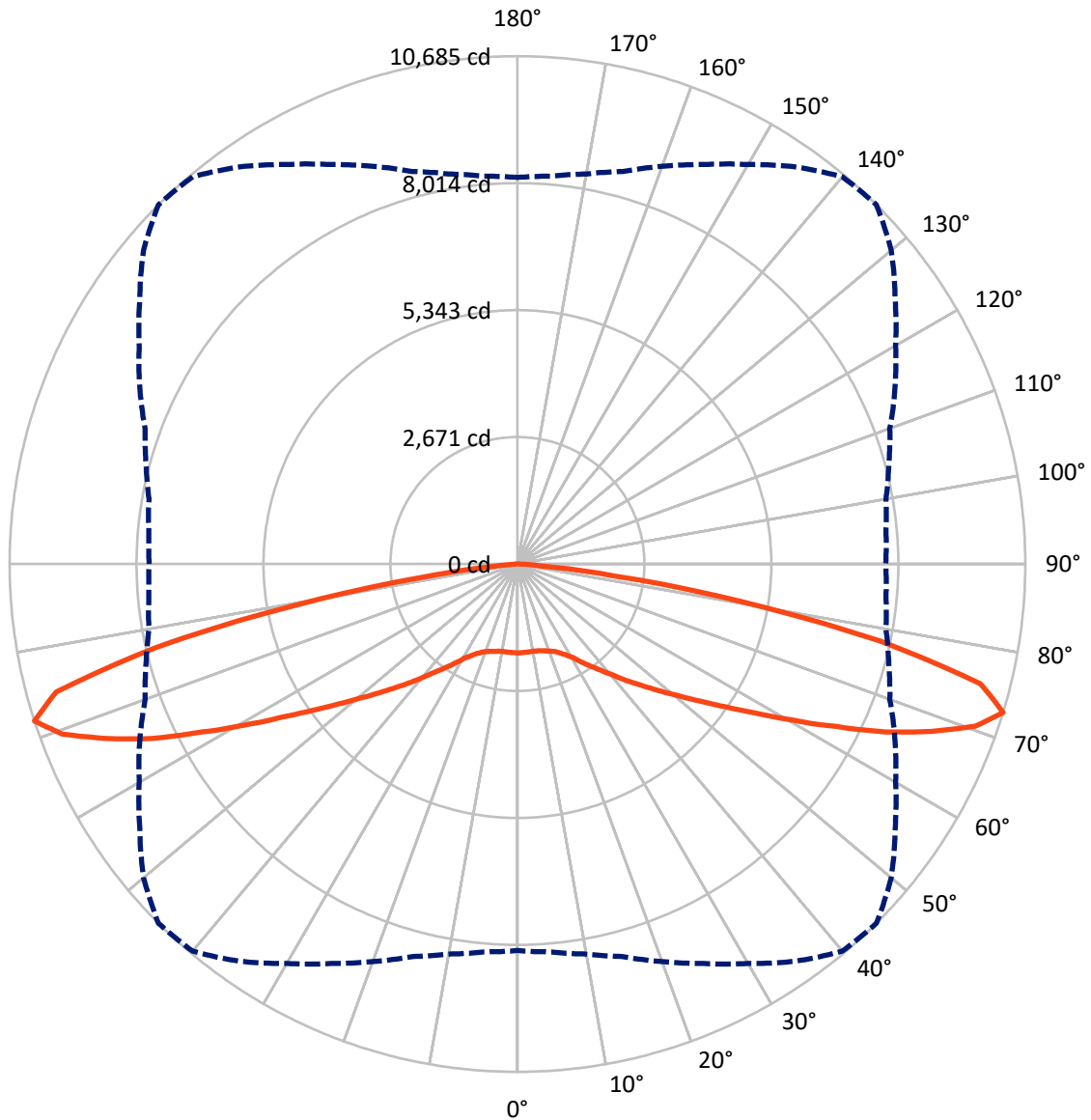
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13153.3	0.0	13153.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	13153.3	0.0	13153.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	26306.6	0.0	26306.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.5	0.7
10°-20°	540.2	2.1
20°-30°	975.3	3.7
30°-40°	1663.6	6.3
40°-50°	2832.3	10.8
50°-60°	4558.1	17.3
60°-70°	7580.2	28.8
70°-80°	7333.0	27.9
80°-90°	645.4	2.5
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°	26306.6	100.0
0°-180°	26306.6	100.0



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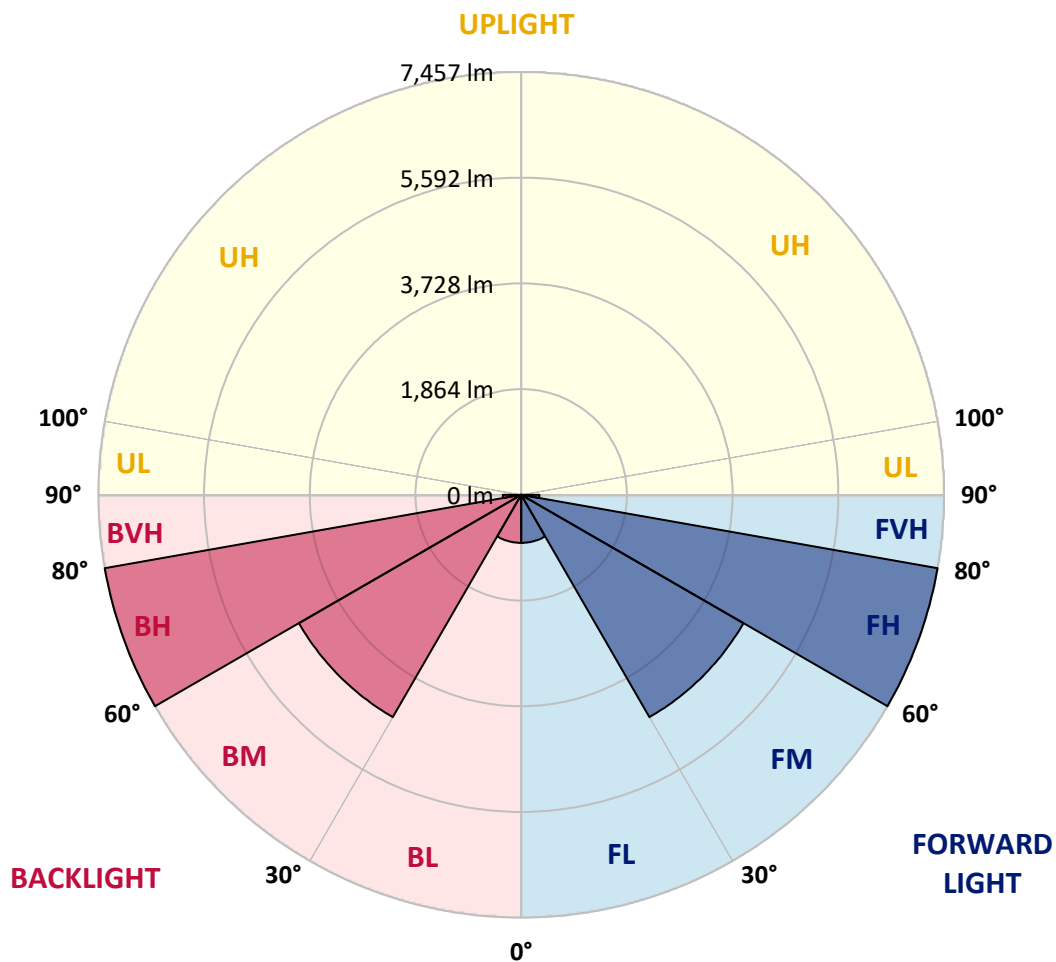
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	847.0	3.2			
FM	(30°-60°)	4527.0	17.2			
FH	(60°-80°)	7456.6	28.3			G3/7500
FVH	(80°-90°)	322.7	1.2			G3/500
BL	(0°-30°)	847.0	3.2	B2/1000		
BM	(30°-60°)	4527.0	17.2	B3/5000		
BH	(60°-80°)	7456.6	28.3	B5		G3/7500
BVH	(80°-90°)	322.7	1.2			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2
2.5°	1884.7	1884.7	1886.4	1884.7	1881.5	1880.0	1875.0	1871.8	1868.6	1866.9	1863.8
5°	1886.4	1886.4	1888.0	1886.4	1883.1	1880.0	1876.6	1871.8	1868.6	1865.3	1863.8
7.5°	1892.9	1894.4	1896.1	1894.4	1888.0	1884.7	1880.0	1875.0	1868.6	1865.3	1862.0
10°	1905.8	1905.8	1905.8	1904.1	1899.3	1892.9	1886.4	1881.5	1873.4	1865.3	1860.5
12.5°	1915.5	1917.2	1917.2	1913.8	1907.5	1899.3	1892.9	1888.0	1881.5	1875.0	1870.2
15°	1930.1	1930.1	1928.5	1922.1	1912.3	1905.8	1902.6	1901.0	1899.3	1896.1	1891.2
17.5°	1959.3	1957.6	1952.7	1943.0	1931.7	1926.9	1923.6	1923.6	1923.6	1922.1	1918.8
20°	2001.3	2001.3	1994.9	1978.6	1968.9	1964.1	1959.3	1959.3	1959.3	1954.4	1949.5
22.5°	2069.3	2071.0	2061.3	2041.8	2028.9	2019.2	2012.7	2007.8	2003.0	1999.7	1991.6
25°	2161.7	2160.1	2148.7	2124.4	2114.7	2105.0	2092.1	2084.0	2077.5	2072.6	2062.9
27.5°	2258.8	2257.3	2244.2	2223.1	2216.7	2202.1	2192.5	2181.1	2173.0	2164.9	2155.3
30°	2383.6	2375.4	2365.6	2349.4	2346.3	2335.0	2321.9	2305.8	2292.8	2279.9	2268.5
32.5°	2495.2	2495.2	2480.7	2472.6	2479.1	2474.2	2475.8	2466.0	2458.0	2453.1	2441.9
35°	2650.7	2650.7	2644.3	2634.5	2636.0	2624.8	2623.1	2624.8	2631.2	2631.2	2618.3
37.5°	2858.0	2861.2	2840.1	2836.8	2828.9	2812.7	2804.5	2807.7	2822.4	2830.4	2812.7
40°	3115.4	3121.9	3115.4	3094.3	3084.6	3057.1	3040.9	3040.9	3052.3	3060.3	3053.9
42.5°	3369.6	3381.0	3369.6	3353.5	3345.3	3324.3	3316.2	3322.7	3337.3	3346.9	3337.3
45°	3653.0	3661.0	3646.5	3627.0	3617.4	3606.1	3601.1	3606.1	3622.2	3631.8	3628.7
47.5°	3931.5	3942.8	3925.1	3916.9	3916.9	3905.7	3918.5	3931.5	3946.1	3968.7	3959.0
50°	4203.4	4218.1	4206.8	4208.4	4221.3	4242.3	4266.7	4292.6	4318.5	4342.8	4346.0
52.5°	4446.4	4469.1	4470.7	4499.8	4540.4	4572.7	4640.7	4697.3	4759.0	4779.9	4770.2
55°	4702.3	4733.0	4773.5	4818.8	4883.5	4950.0	5065.0	5167.0	5247.9	5298.2	5289.9
57.5°	5068.1	5098.9	5141.0	5215.5	5312.7	5403.3	5560.4	5719.1	5842.1	5918.3	5881.1
60°	5542.6	5575.1	5630.0	5709.4	5835.7	5958.7	6174.1	6402.4	6593.5	6681.0	6613.0
62.5°	6170.8	6201.5	6237.2	6342.6	6483.3	6642.1	6912.5	7205.6	7448.4	7532.6	7437.1
65°	7066.2	7103.5	7114.8	7200.8	7338.3	7485.7	7777.2	8107.5	8384.3	8522.0	8330.9
67.5°	8075.0	8089.6	8135.1	8235.4	8376.2	8509.0	8738.9	9051.5	9317.0	9393.1	9189.1
70°	8666.0	8695.2	8774.6	8913.8	9082.3	9291.1	9542.1	9878.9	10180.0	10215.6	9956.6
72.5°	8131.7	8191.6	8332.6	8549.4	8902.6	9273.4	9705.6	10202.7	10635.0	10685.2	10269.2
75°	6522.2	6590.2	6758.7	6996.7	7414.4	7965.0	8590.0	9336.4	9984.1	10066.8	9516.1
77.5°	3476.5	3560.7	3805.2	4125.7	4721.6	5450.2	6203.2	7055.0	7605.5	7791.7	7394.9
80°	875.9	921.3	1039.6	1227.4	1630.6	2218.4	2867.7	3784.1	4467.5	4757.2	4467.5
82.5°	340.1	374.1	406.5	429.1	467.9	549.0	757.8	1235.4	1664.6	2049.9	1774.7
85°	131.2	139.2	200.9	228.3	228.3	250.9	288.3	340.1	420.9	459.8	385.4
87.5°	51.8	56.7	69.6	106.9	110.1	97.1	103.7	116.6	89.0	74.5	84.3
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2	1870.2
2.5°	1862.0	1860.5	1857.2	1858.9	1857.2	1857.2	1857.2	1857.2
5°	1860.5	1860.5	1857.2	1857.2	1857.2	1858.9	1857.2	1857.2
7.5°	1858.9	1857.2	1854.0	1852.3	1852.3	1850.8	1850.8	1850.8
10°	1855.5	1852.3	1849.2	1847.5	1847.5	1844.3	1844.3	1844.3
12.5°	1863.8	1858.9	1855.5	1854.0	1854.0	1854.0	1855.5	1855.5
15°	1886.4	1876.6	1871.8	1870.2	1871.8	1875.0	1876.6	1878.3
17.5°	1910.7	1901.0	1892.9	1889.7	1891.2	1896.1	1901.0	1904.1
20°	1941.4	1933.3	1923.6	1920.3	1920.3	1926.9	1930.1	1934.9
22.5°	1985.2	1978.6	1970.6	1965.8	1962.4	1970.6	1975.5	1978.6
25°	2054.9	2048.3	2041.8	2036.9	2035.4	2043.5	2046.7	2048.3
27.5°	2147.0	2140.7	2137.3	2135.8	2130.9	2134.2	2139.0	2137.3
30°	2267.0	2271.8	2267.0	2267.0	2258.8	2262.0	2258.8	2255.6
32.5°	2427.2	2422.4	2407.7	2398.0	2386.7	2386.7	2381.9	2377.1
35°	2587.5	2571.3	2563.3	2568.1	2563.3	2566.5	2558.4	2550.3
37.5°	2777.0	2767.3	2765.6	2780.3	2777.0	2780.3	2780.3	2768.8
40°	3027.9	3021.4	3032.8	3057.1	3066.9	3065.1	3068.4	3053.9
42.5°	3316.2	3304.9	3309.6	3330.7	3342.1	3345.3	3343.8	3330.7
45°	3604.4	3607.7	3607.7	3630.3	3641.5	3648.0	3636.8	3631.8
47.5°	3929.8	3934.8	3923.3	3938.0	3941.3	3952.5	3942.8	3934.8
50°	4305.5	4287.7	4261.7	4266.7	4266.7	4263.4	4252.0	4242.3
52.5°	4724.8	4684.4	4635.9	4619.7	4601.8	4584.1	4561.4	4543.5
55°	5202.5	5132.9	5045.5	5005.0	4971.0	4930.5	4878.8	4860.9
57.5°	5756.3	5636.5	5519.9	5447.1	5359.6	5306.2	5239.9	5236.6
60°	6413.8	6251.8	6046.2	5937.6	5850.2	5787.2	5736.9	5717.5
62.5°	7173.1	6894.6	6672.8	6556.2	6454.2	6415.3	6352.3	6360.3
65°	7952.1	7668.7	7453.2	7359.4	7263.9	7238.0	7179.7	7200.8
67.5°	8795.7	8562.5	8326.1	8238.6	8151.2	8125.3	8065.3	8083.2
70°	9551.8	9255.4	8986.7	8815.1	8666.0	8546.3	8470.2	8439.3
72.5°	9702.5	9189.1	8766.5	8337.3	8089.6	7872.7	7783.6	7749.6
75°	8718.0	7921.3	7318.9	6815.4	6536.7	6221.0	6187.0	6140.2
77.5°	6781.3	5874.6	5145.9	4498.3	4124.2	3738.7	3606.1	3505.6
80°	4044.8	3108.9	2409.4	1688.9	1378.0	1109.1	1042.8	973.1
82.5°	1447.6	927.8	625.0	487.4	435.6	401.5	375.6	341.6
85°	349.8	294.7	278.6	252.7	249.4	212.1	150.6	134.3
87.5°	111.7	102.0	103.7	98.8	103.7	77.8	63.2	56.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)