

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: P960275

Luminaire Tested: **NAV-SB1C-727-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960275  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-727-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

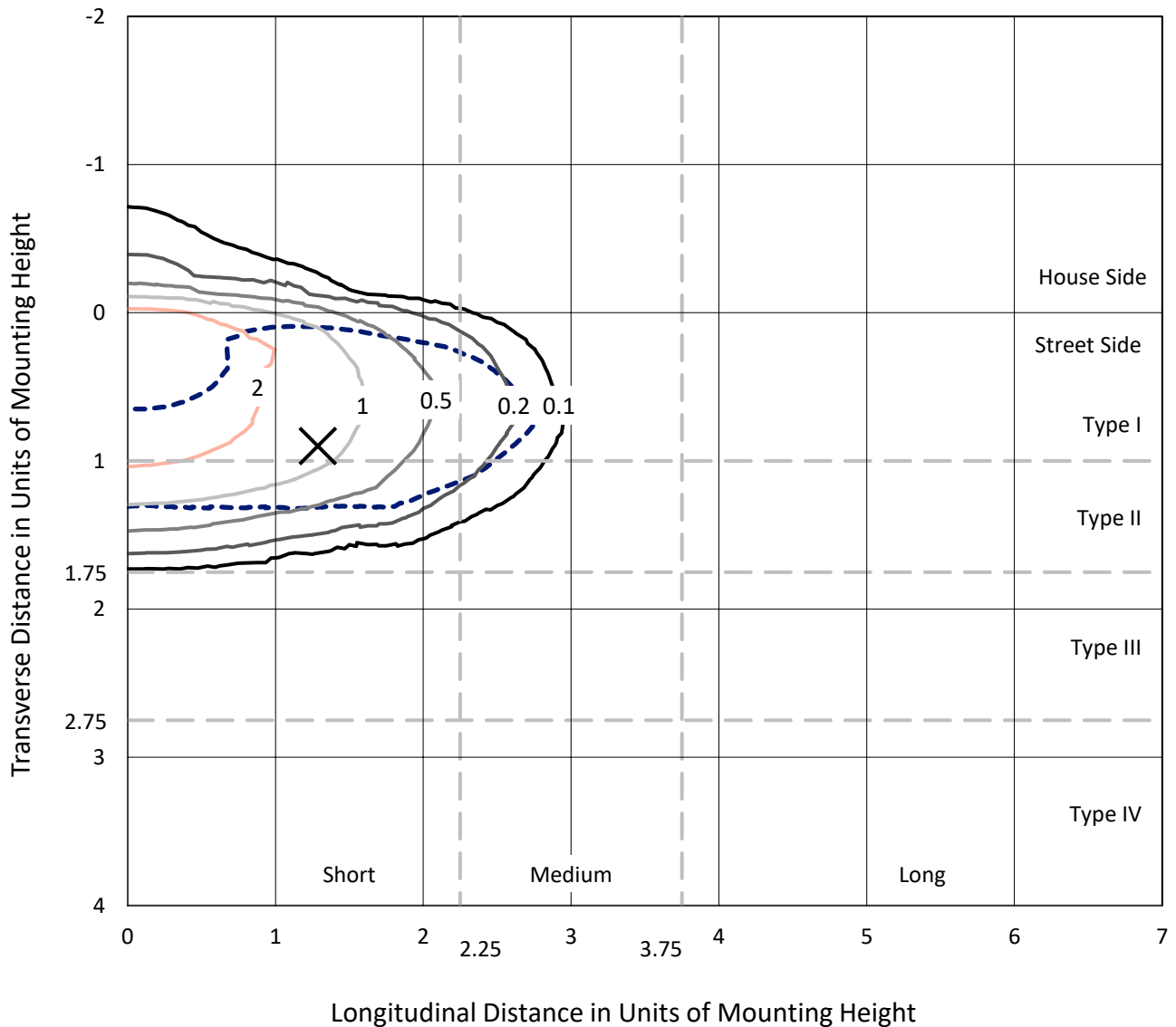
Lumens per Lamp: N/A  
Luminaire Lumens: 6073.1 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 54.4  
Input Voltage (V): NR  
Input Current (Ain): 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: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

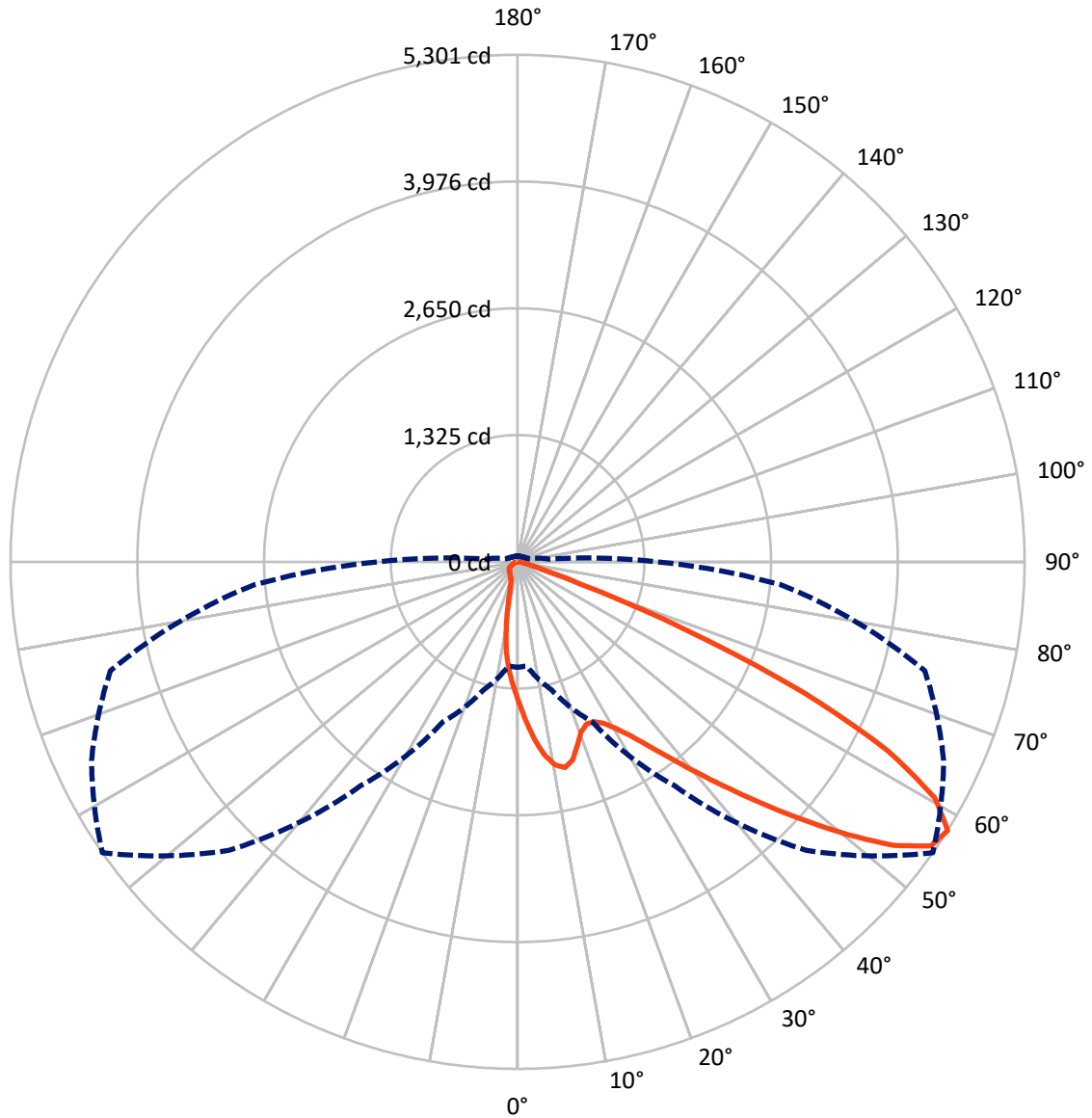
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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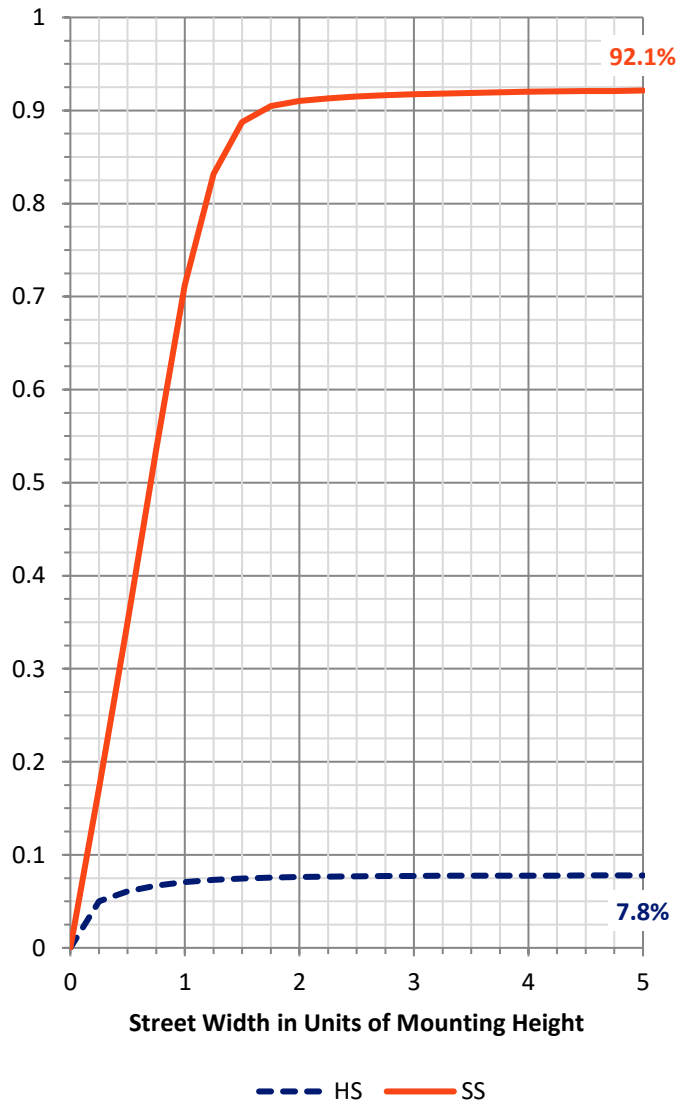
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	474.3	0.0	474.3
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	5598.8	0.0	5598.8
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	6073.1	0.0	6073.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.2	2.2
10°-20°	328.9	5.4
20°-30°	526.3	8.7
30°-40°	890.7	14.7
40°-50°	1462.4	24.1
50°-60°	1607.3	26.5
60°-70°	921.9	15.2
70°-80°	188.4	3.1
80°-90°	11.1	0.2
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°	6073.1	100.0
0°-180°	6073.1	100.0

**Coefficient of Utilization**



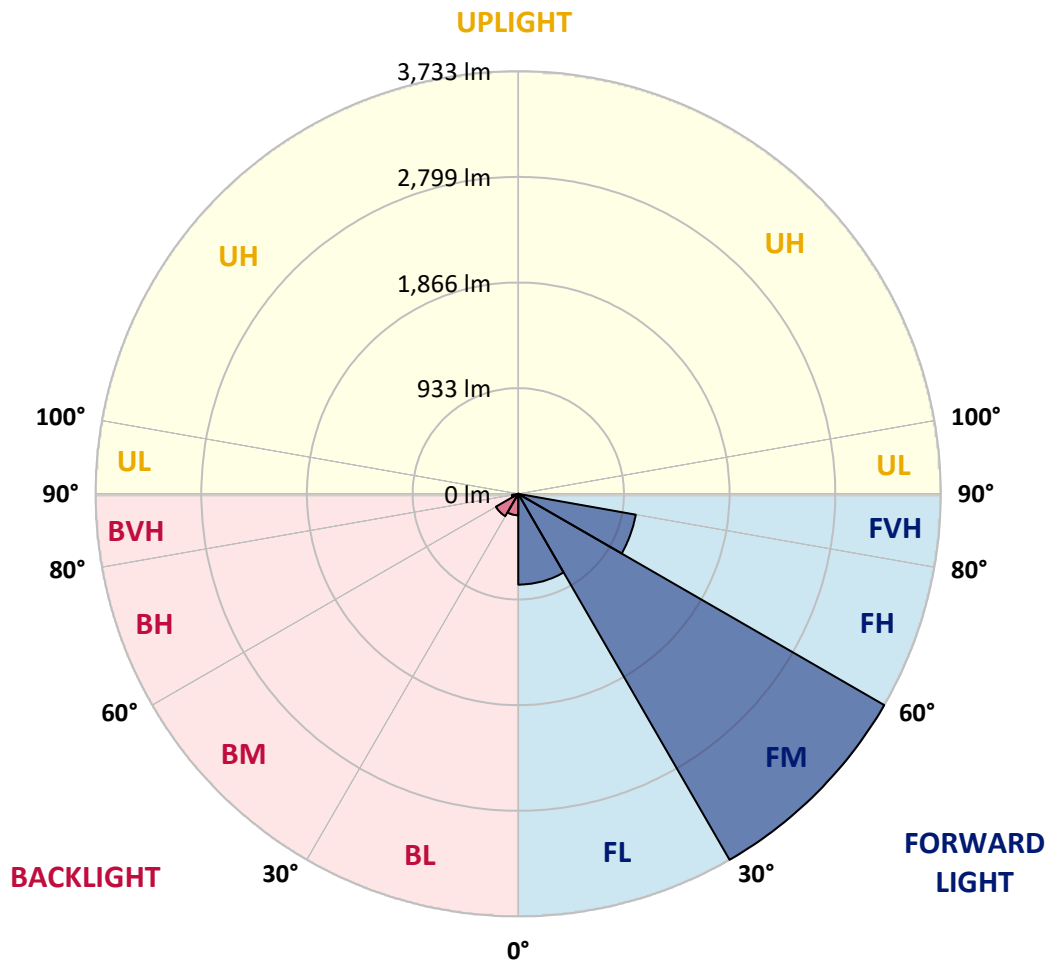
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	802.0	13.2			
FM (30°-60°)	3732.6	61.5			
FH (60°-80°)	1053.9	17.4			G1/1800
FVH (80°-90°)	10.4	0.2			G1/100
BL (0°-30°)	189.3	3.1	B1/500		
BM (30°-60°)	227.8	3.8	B1/1000		
BH (60°-80°)	56.4	0.9	B0/110		G0/110
BVH (80°-90°)	0.8	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°	65°	75°	85°	90°
0°	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5
2.5°	1815.9	1793.0	1789.6	1785.1	1741.7	1709.1	1661.9	1610.3	1552.3	1493.0	1466.9
5°	2097.9	2079.8	2076.5	2055.5	2006.1	1950.7	1866.8	1760.8	1652.6	1525.3	1470.6
7.5°	2152.5	2149.1	2164.5	2163.8	2157.0	2113.2	2042.4	1916.2	1753.7	1565.0	1480.3
10°	1908.8	1917.4	1963.1	2003.1	2111.3	2174.2	2158.9	2054.8	1857.8	1610.3	1491.2
12.5°	1686.6	1676.6	1709.1	1754.5	1880.3	2067.5	2207.2	2170.5	1976.9	1661.5	1507.3
15°	1547.3	1543.2	1561.6	1582.6	1678.4	1867.1	2151.1	2264.5	2091.5	1722.2	1531.7
17.5°	1502.8	1499.5	1505.0	1510.2	1572.5	1718.5	2017.3	2322.1	2201.2	1791.5	1558.6
20°	1539.1	1534.6	1533.9	1529.7	1555.6	1655.2	1896.4	2326.2	2299.7	1854.4	1581.8
22.5°	1645.1	1639.9	1621.6	1605.0	1607.3	1663.8	1842.4	2285.1	2373.8	1913.3	1596.4
25°	1837.2	1828.6	1790.4	1735.0	1699.8	1723.7	1850.6	2230.8	2444.6	1959.3	1589.3
27.5°	2077.6	2066.4	2017.3	1935.0	1854.4	1825.2	1910.2	2193.3	2503.4	1994.4	1574.0
30°	2313.2	2298.6	2250.3	2186.2	2068.7	1976.5	2017.7	2209.8	2573.5	2031.1	1553.7
32.5°	2567.4	2553.6	2489.5	2410.2	2312.8	2188.9	2164.9	2290.4	2659.2	2082.5	1539.4
35°	2889.2	2867.4	2776.4	2668.2	2564.9	2439.4	2364.1	2429.2	2773.4	2160.8	1547.3
37.5°	3255.4	3226.2	3128.0	2978.6	2843.9	2703.3	2606.8	2620.2	2940.8	2265.7	1571.7
40°	3600.6	3574.1	3483.5	3342.6	3173.4	3002.9	2900.0	2870.0	3171.9	2393.3	1614.4
42.5°	3807.8	3783.8	3745.6	3686.0	3543.3	3369.6	3239.6	3174.8	3445.2	2546.1	1666.4
45°	3819.4	3798.3	3849.7	3919.0	3890.9	3775.2	3616.7	3498.0	3719.7	2689.5	1720.4
47.5°	3633.6	3619.4	3775.2	4017.1	4137.6	4186.3	4040.2	3794.2	3946.2	2792.5	1742.5
50°	3127.3	3122.0	3442.6	3886.7	4231.6	4546.6	4487.0	4069.9	4121.9	2845.7	1721.5
52.5°	2711.6	2692.6	2879.4	3469.5	4095.0	4736.1	4923.7	4340.3	4244.7	2855.8	1672.4
55°	2056.7	2039.7	2274.3	2771.5	3654.2	4668.7	5243.1	4619.3	4332.8	2829.9	1584.4
57.5°	1103.2	1092.8	1389.0	1844.7	2856.6	4264.2	5300.8	4914.4	4406.9	2761.5	1461.2
60°	429.6	427.6	538.5	895.0	1736.1	3469.2	5009.8	5091.5	4453.3	2677.2	1358.2
62.5°	259.9	265.5	283.5	401.8	766.9	2155.2	4339.1	4890.0	4484.4	2600.0	1273.3
65°	214.9	215.4	217.6	276.0	367.4	901.8	3266.6	4227.1	4407.6	2462.6	1152.6
67.5°	184.3	187.6	196.2	219.0	259.1	395.4	1880.7	3274.5	3940.7	2142.8	964.6
70°	145.3	149.8	160.6	180.1	200.0	247.5	695.1	2178.7	3010.4	1615.1	729.5
72.5°	122.5	122.1	127.7	146.5	158.8	174.1	267.4	1220.8	1749.6	771.1	361.0
75°	94.7	98.5	105.6	122.5	130.0	126.2	144.9	446.0	626.9	233.7	122.8
77.5°	74.1	77.2	83.5	99.9	107.5	89.5	83.5	159.5	201.5	83.8	55.5
80°	33.3	36.0	56.9	73.8	87.6	61.8	45.3	81.6	89.5	38.2	28.1
82.5°	5.9	10.1	33.3	38.9	44.9	40.1	23.6	42.3	43.8	15.4	9.7
85°	0.4	0.7	11.6	14.2	17.9	13.1	7.1	16.8	14.6	5.2	3.8
87.5°	0.0	0.0	0.0	0.4	0.4	1.8	2.3	3.0	2.3	1.8	1.5
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5	1463.5
2.5°	1439.9	1386.7	1335.1	1292.7	1268.0	1226.0	1198.3	1193.8	1182.2	1192.4
5°	1412.1	1317.0	1220.8	1134.7	1063.9	972.5	904.4	875.6	850.4	859.1
7.5°	1399.0	1248.9	1099.1	951.9	800.6	654.6	546.0	500.7	466.3	471.1
10°	1381.5	1178.1	943.3	718.6	516.0	371.9	296.9	269.3	253.9	254.3
12.5°	1368.0	1093.5	762.4	487.2	314.2	237.4	214.2	207.5	203.0	203.4
15°	1361.2	993.8	583.8	324.7	224.7	201.1	195.5	192.5	189.5	189.1
17.5°	1350.0	883.0	427.3	237.1	196.6	188.4	183.5	180.1	176.4	175.6
20°	1333.1	757.2	312.3	200.4	184.3	177.8	171.2	166.7	162.2	161.4
22.5°	1302.1	624.2	240.1	185.3	175.3	168.1	159.9	154.7	150.2	149.4
25°	1244.5	499.6	202.2	176.0	167.4	158.8	149.8	142.7	138.6	137.8
27.5°	1171.4	392.5	183.5	167.4	157.2	149.4	139.3	132.5	128.8	128.0
30°	1085.3	302.2	172.6	157.6	145.3	138.6	129.6	123.9	121.7	121.7
32.5°	992.4	241.5	168.1	147.9	134.8	127.3	120.2	118.0	117.3	116.8
35°	905.1	209.7	165.8	140.0	125.5	118.3	115.3	115.7	117.3	117.3
37.5°	827.6	199.6	164.8	134.5	117.3	110.8	112.7	116.1	114.6	114.6
40°	757.6	200.7	164.0	130.3	110.5	106.7	110.5	107.8	104.1	103.7
42.5°	704.1	210.1	162.6	127.0	106.4	103.7	102.2	98.1	97.8	98.5
45°	665.1	218.3	162.2	125.5	101.9	97.0	95.1	91.0	98.5	100.3
47.5°	619.0	218.3	162.2	120.2	94.4	92.5	89.5	85.0	92.5	94.4
50°	559.4	204.5	155.8	114.2	88.4	87.2	82.0	76.4	74.9	76.1
52.5°	484.2	179.4	139.7	106.0	82.4	80.2	73.8	69.7	68.6	68.6
55°	398.4	150.2	118.0	94.0	76.1	71.9	67.4	65.5	64.4	63.7
57.5°	323.9	123.2	94.7	83.5	70.0	64.8	63.2	61.1	59.1	58.0
60°	265.9	97.0	78.3	74.1	64.1	59.1	58.8	55.8	50.9	50.2
62.5°	205.2	71.1	65.9	64.4	58.0	53.9	53.2	47.2	39.7	38.2
65°	144.9	55.5	53.2	56.6	51.7	48.0	46.0	37.1	29.2	28.1
67.5°	101.9	46.4	41.9	49.4	44.9	40.1	38.9	31.5	24.3	23.6
70°	72.7	37.8	34.4	42.3	36.0	35.2	33.0	26.2	19.9	19.1
72.5°	51.4	28.8	26.5	36.7	24.7	30.3	27.0	20.2	15.0	14.2
75°	37.8	20.6	18.8	21.3	17.9	22.9	19.1	13.5	9.3	9.0
77.5°	27.7	13.1	11.3	10.5	10.5	14.2	10.5	5.6	4.1	3.8
80°	19.5	5.9	5.2	4.5	4.1	3.4	1.5	0.7	0.4	0.4
82.5°	11.6	2.7	2.7	1.8	1.1	0.0	0.0	0.0	0.0	0.0
85°	2.7	1.1	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)