

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: P960771

Luminaire Tested: **NAV-SB1D-722-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960771  
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-SB1D-722-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

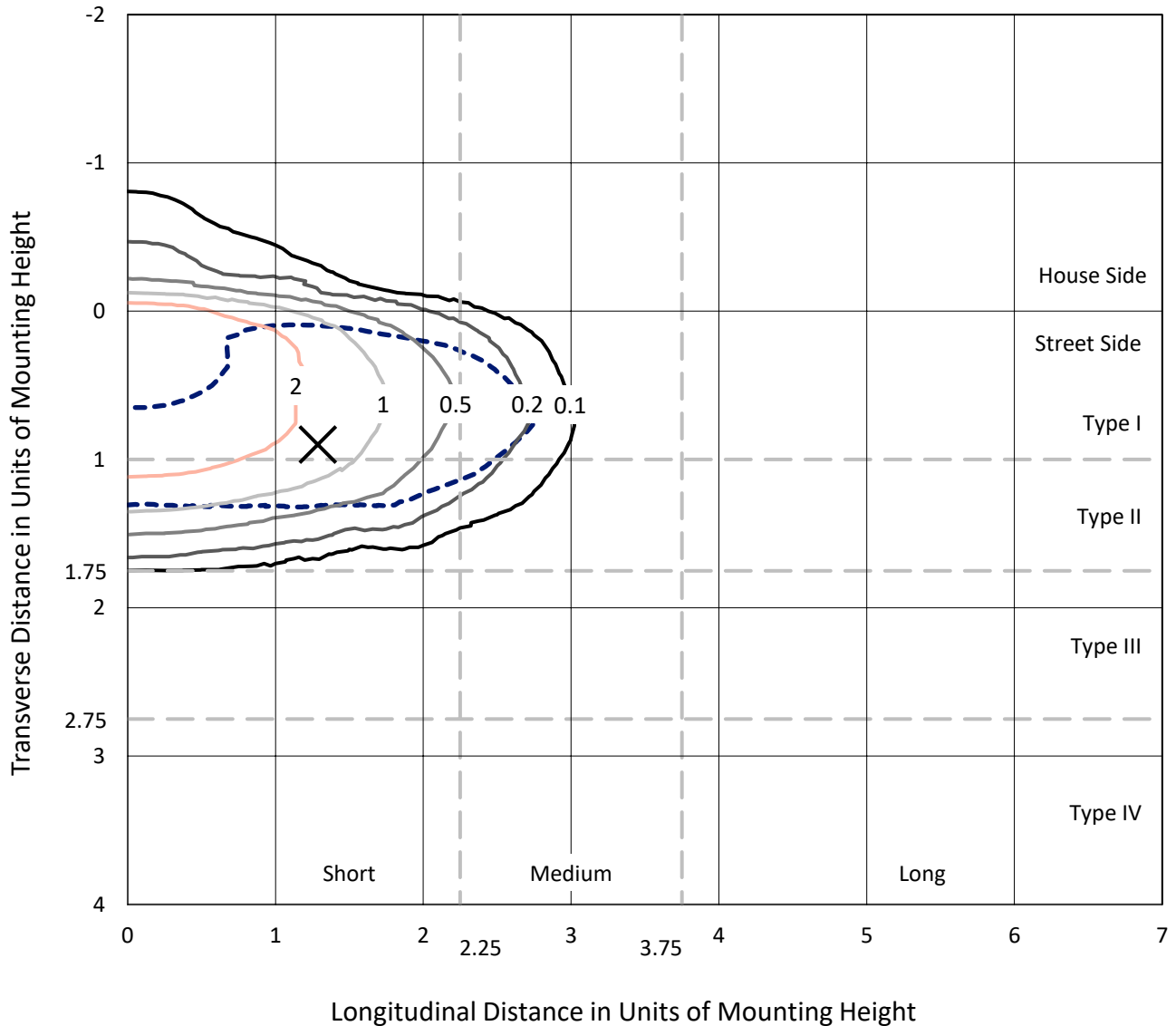
Lumens per Lamp: N/A  
Luminaire Lumens: 7349.3 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 79.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P960771  
 CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

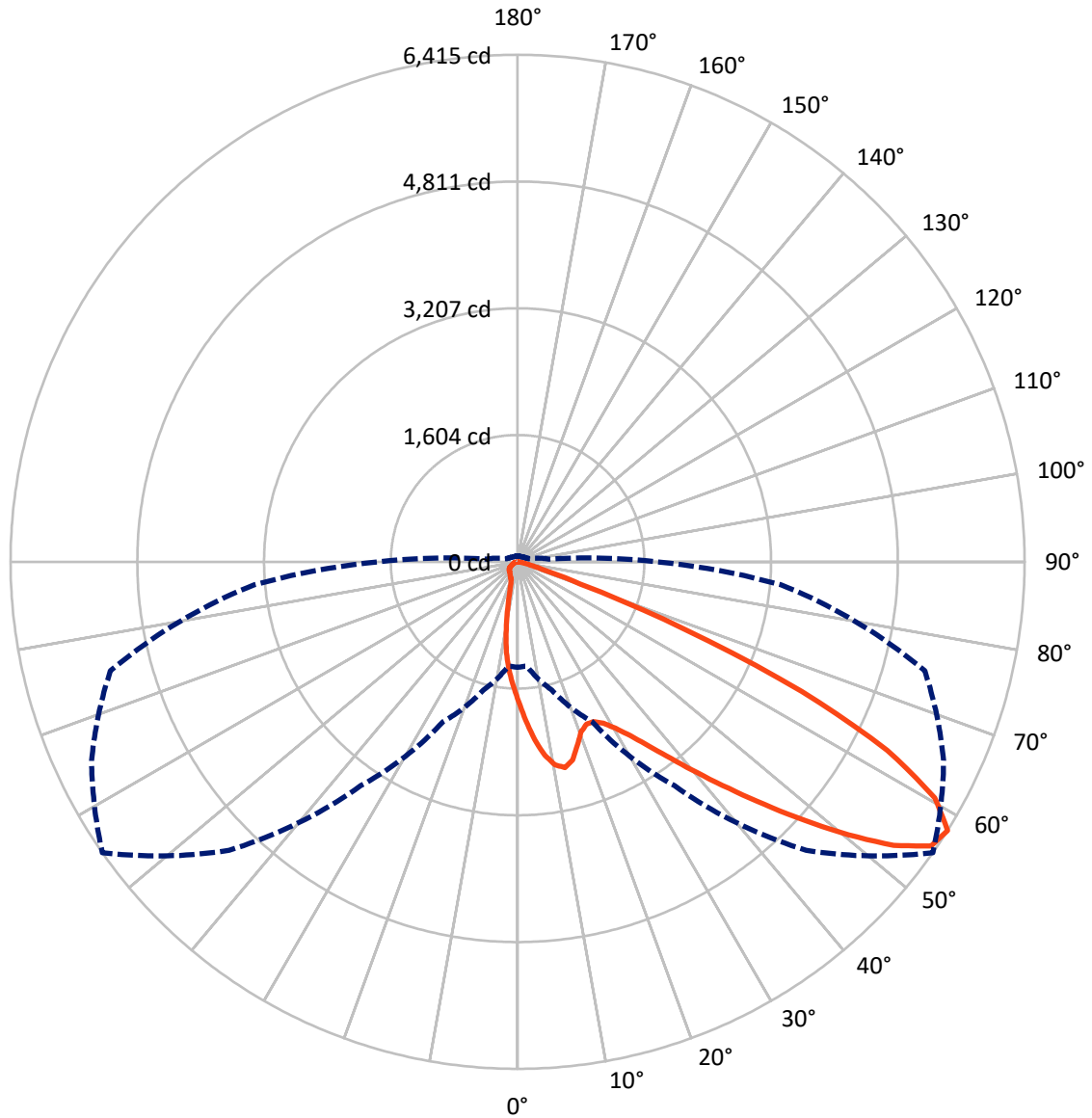
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type II - Short - N/A

REPORT NUMBER: P960771  
CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P960771  
 CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	573.9	0.0	573.9
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	6775.3	0.0	6775.3
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	7349.3	0.0	7349.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.8	2.2
10°-20°	398.0	5.4
20°-30°	636.8	8.7
30°-40°	1077.9	14.7
40°-50°	1769.7	24.1
50°-60°	1945.0	26.5
60°-70°	1115.6	15.2
70°-80°	228.0	3.1
80°-90°	13.4	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°	7349.3	100.0
0°-180°	7349.3	100.0

**Coefficient of Utilization**



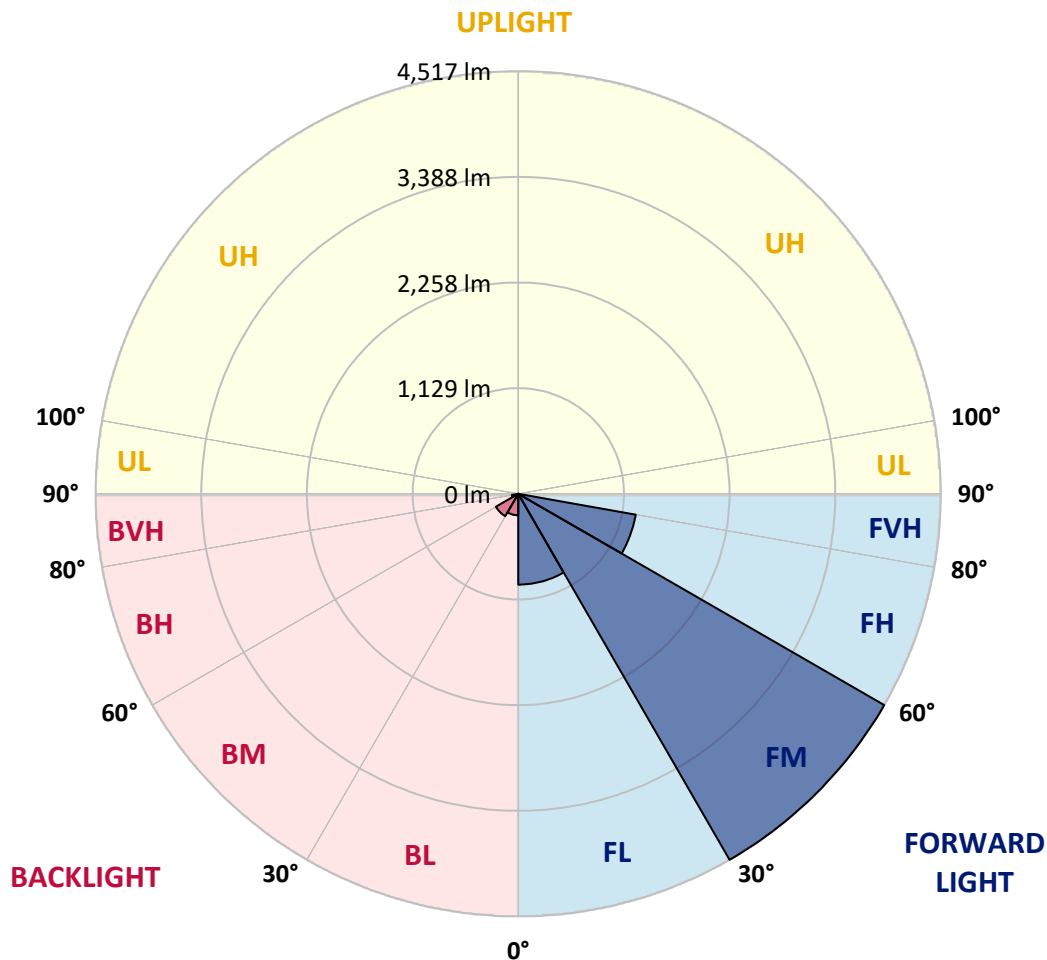
REPORT NUMBER: P960771  
 CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	970.5	13.2			
FM (30°-60°)	4516.9	61.5			
FH (60°-80°)	1275.4	17.4			G1/1800
FVH (80°-90°)	12.5	0.2			G1/100
BL (0°-30°)	229.1	3.1	B1/500		
BM (30°-60°)	275.6	3.8	B1/1000		
BH (60°-80°)	68.3	0.9	B0/110		G0/110
BVH (80°-90°)	0.9	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



REPORT NUMBER: P960771  
 CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0
2.5°	2197.4	2169.8	2165.7	2160.3	2107.7	2068.2	2011.2	1948.6	1878.4	1806.8	1775.1
5°	2538.6	2516.9	2512.8	2487.5	2427.6	2360.6	2259.1	2130.8	1999.9	1845.7	1779.6
7.5°	2604.8	2600.7	2619.3	2618.5	2610.3	2557.3	2471.6	2318.9	2122.2	1893.8	1791.4
10°	2309.8	2320.2	2375.5	2424.0	2555.0	2631.1	2612.5	2486.5	2248.1	1948.6	1804.5
12.5°	2041.1	2028.9	2068.2	2123.1	2275.4	2501.9	2670.9	2626.6	2392.2	2010.7	1824.0
15°	1872.5	1867.5	1889.7	1915.1	2031.1	2259.5	2603.0	2740.3	2530.9	2084.1	1853.5
17.5°	1818.6	1814.5	1821.3	1827.7	1902.8	2079.6	2441.2	2810.1	2663.8	2168.0	1886.1
20°	1862.5	1857.1	1856.2	1851.2	1882.5	2003.1	2294.9	2815.1	2782.9	2244.1	1914.2
22.5°	1990.8	1984.4	1962.3	1942.3	1945.0	2013.4	2229.6	2765.2	2872.7	2315.3	1931.8
25°	2223.2	2212.9	2166.6	2099.5	2057.0	2086.0	2239.5	2699.5	2958.3	2371.0	1923.2
27.5°	2514.2	2500.6	2441.2	2341.5	2244.1	2208.8	2311.6	2654.2	3029.5	2413.6	1904.7
30°	2799.3	2781.5	2723.1	2645.6	2503.4	2391.8	2441.7	2674.1	3114.2	2458.0	1880.2
32.5°	3107.0	3090.2	3012.7	2916.6	2798.8	2648.8	2619.8	2771.6	3218.0	2520.1	1862.9
35°	3496.2	3469.9	3359.8	3228.9	3103.8	2952.0	2860.9	2939.7	3356.2	2614.8	1872.5
37.5°	3939.4	3904.0	3785.3	3604.5	3441.3	3271.4	3154.5	3170.8	3558.7	2741.7	1902.0
40°	4357.3	4325.1	4215.4	4045.0	3840.2	3633.9	3509.4	3473.1	3838.3	2896.2	1953.6
42.5°	4607.8	4578.9	4532.7	4460.6	4287.9	4077.7	3920.4	3842.0	4169.2	3081.1	2016.6
45°	4621.9	4596.5	4658.6	4742.5	4708.4	4568.4	4376.8	4233.0	4501.3	3254.7	2081.9
47.5°	4397.1	4379.9	4568.4	4861.2	5007.1	5066.0	4889.2	4591.5	4775.5	3379.3	2108.6
50°	3784.4	3778.0	4166.0	4703.4	5120.8	5501.9	5429.8	4925.0	4988.1	3443.6	2083.2
52.5°	3281.4	3258.3	3484.4	4198.6	4955.4	5731.3	5958.3	5252.2	5136.7	3455.9	2023.9
55°	2488.8	2468.4	2752.1	3353.9	4422.1	5649.7	6344.9	5589.8	5243.2	3424.6	1917.4
57.5°	1335.1	1322.4	1680.8	2232.3	3456.8	5160.3	6414.7	5946.9	5332.9	3341.7	1768.2
60°	519.8	517.5	651.7	1083.1	2100.9	4198.2	6062.5	6161.3	5389.1	3239.7	1643.7
62.5°	314.5	321.3	343.1	486.3	928.1	2608.0	5250.9	5917.5	5426.8	3146.3	1540.8
65°	260.1	260.6	263.3	333.9	444.5	1091.2	3953.0	5115.4	5333.8	2980.1	1394.8
67.5°	222.9	227.0	237.5	265.1	313.5	478.6	2275.8	3962.5	4768.7	2593.0	1167.4
70°	175.8	181.2	194.4	218.0	242.0	299.5	841.1	2636.5	3643.1	1954.6	882.7
72.5°	148.2	147.7	154.6	177.2	192.2	210.7	323.6	1477.3	2117.2	933.1	436.9
75°	114.7	119.2	127.8	148.2	157.2	152.7	175.4	539.8	758.6	282.8	148.6
77.5°	89.7	93.4	101.1	121.0	130.1	108.3	101.1	193.0	243.8	101.5	67.0
80°	40.3	43.5	68.9	89.3	106.1	74.7	54.8	98.8	108.3	46.2	34.0
82.5°	7.3	12.2	40.3	47.2	54.4	48.5	28.6	51.2	53.0	18.6	11.8
85°	0.4	0.9	14.0	17.2	21.7	15.9	8.6	20.4	17.6	6.4	4.5
87.5°	0.0	0.0	0.0	0.4	0.4	2.3	2.8	3.6	2.8	2.3	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P960771  
 CATALOG NUMBER: NAV-SB1D-722-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0	1771.0
2.5°	1742.4	1678.1	1615.5	1564.4	1534.4	1483.7	1450.2	1444.7	1430.7	1442.9
5°	1708.9	1593.8	1477.3	1373.1	1287.5	1176.9	1094.4	1059.5	1029.1	1039.6
7.5°	1693.0	1511.4	1330.0	1152.0	968.8	792.1	660.7	605.9	564.2	570.1
10°	1671.8	1425.7	1141.5	869.6	624.4	450.0	359.4	325.8	307.3	307.7
12.5°	1655.5	1323.3	922.7	589.6	380.2	287.3	259.2	251.0	245.6	246.1
15°	1647.3	1202.7	706.5	392.9	271.9	243.3	236.6	232.9	229.3	228.9
17.5°	1633.6	1068.6	517.1	286.9	237.9	228.0	222.0	218.0	213.4	212.6
20°	1613.2	916.4	377.9	242.4	222.9	215.2	207.0	201.6	196.2	195.4
22.5°	1575.6	755.4	290.5	224.3	212.1	203.5	193.5	187.2	181.7	180.8
25°	1505.9	604.5	244.7	213.0	202.5	192.2	181.2	172.6	167.7	166.8
27.5°	1417.5	474.9	222.0	202.5	190.3	180.8	168.6	160.4	155.9	155.0
30°	1313.3	365.7	208.9	190.8	175.8	167.7	156.8	150.0	147.3	147.3
32.5°	1200.9	292.3	203.5	179.0	163.2	154.1	145.4	142.8	141.9	141.3
35°	1095.3	253.8	200.8	169.5	151.8	143.2	139.6	140.0	141.9	141.9
37.5°	1001.5	241.5	199.4	162.7	141.9	134.2	136.4	140.5	138.7	138.7
40°	916.8	242.9	198.4	157.7	133.7	129.1	133.7	130.5	126.0	125.6
42.5°	852.0	254.2	196.7	153.6	128.7	125.6	123.7	118.7	118.3	119.2
45°	804.8	264.2	196.2	151.8	123.3	117.4	115.1	110.1	119.2	121.5
47.5°	749.1	264.2	196.2	145.4	114.2	111.9	108.3	102.9	111.9	114.2
50°	677.0	247.4	188.5	138.2	106.9	105.6	99.2	92.5	90.6	91.9
52.5°	586.0	217.1	169.0	128.2	99.7	97.0	89.3	84.3	82.9	82.9
55°	482.2	181.7	142.8	113.8	91.9	87.0	81.6	79.3	77.9	77.1
57.5°	392.0	149.1	114.7	101.1	84.8	78.4	76.6	73.9	71.6	70.2
60°	321.7	117.4	94.7	89.7	77.5	71.6	71.1	67.5	61.6	60.7
62.5°	248.4	86.1	79.7	77.9	70.2	65.3	64.4	57.1	48.1	46.2
65°	175.4	67.0	64.4	68.5	62.5	58.0	55.8	44.9	35.4	34.0
67.5°	123.3	56.2	50.7	59.9	54.4	48.5	47.2	38.0	29.4	28.6
70°	87.9	45.8	41.7	51.2	43.5	42.6	39.9	31.7	24.0	23.1
72.5°	62.1	34.8	32.2	44.4	29.9	36.7	32.6	24.5	18.1	17.2
75°	45.8	24.9	22.7	25.8	21.7	27.7	23.1	16.3	11.4	10.9
77.5°	33.5	15.9	13.6	12.7	12.7	17.2	12.7	6.8	5.0	4.5
80°	23.6	7.3	6.4	5.4	5.0	4.1	1.8	0.9	0.4	0.4
82.5°	14.0	3.2	3.2	2.3	1.3	0.0	0.0	0.0	0.0	0.0
85°	3.2	1.3	1.3	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)