

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: P883084

Luminaire Tested: **NAV-SB3B-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16743 lumens
Efficiency: N/A
Efficacy: 153.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

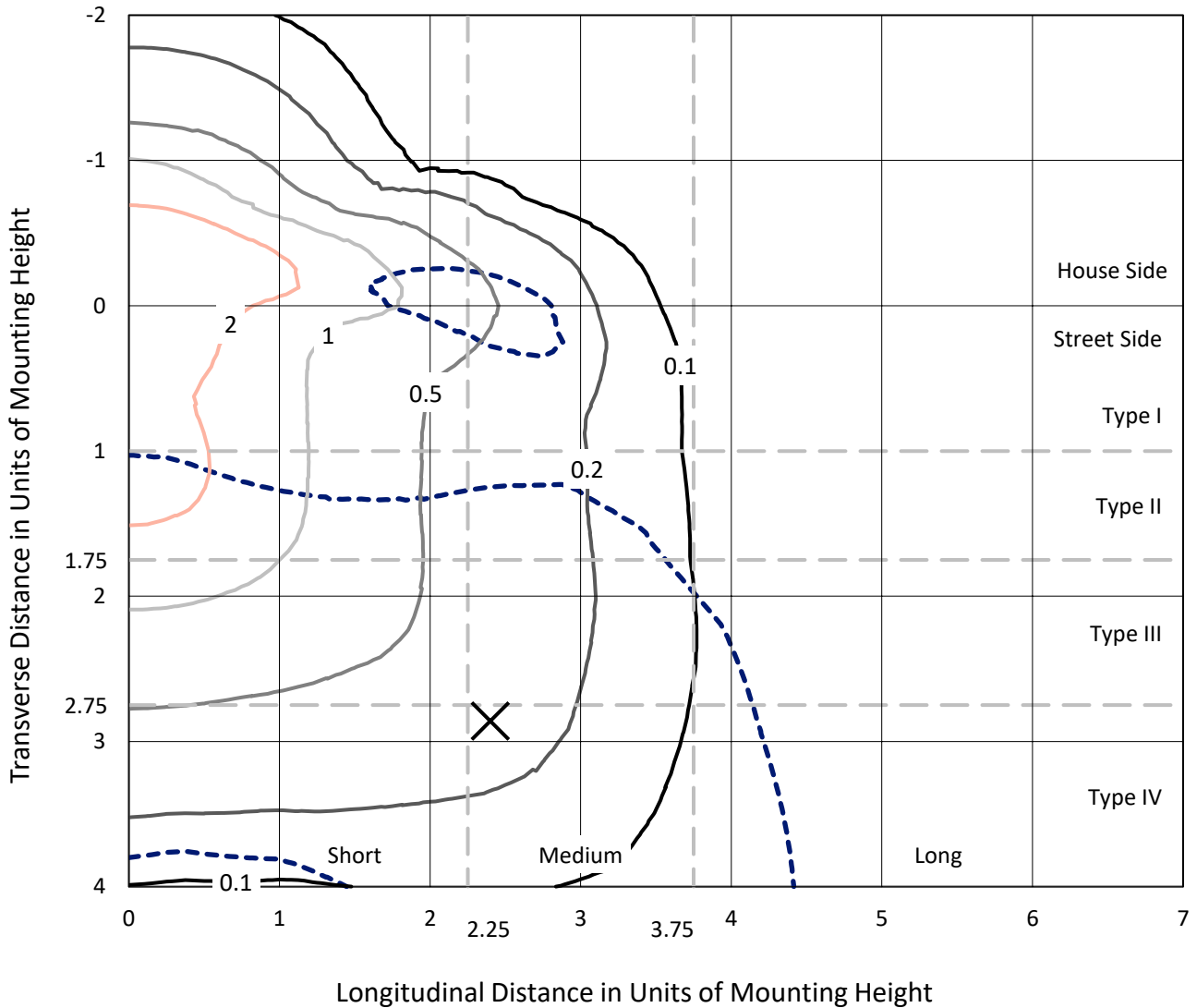
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883084
 CATALOG NUMBER: NAV-SB3B-735-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

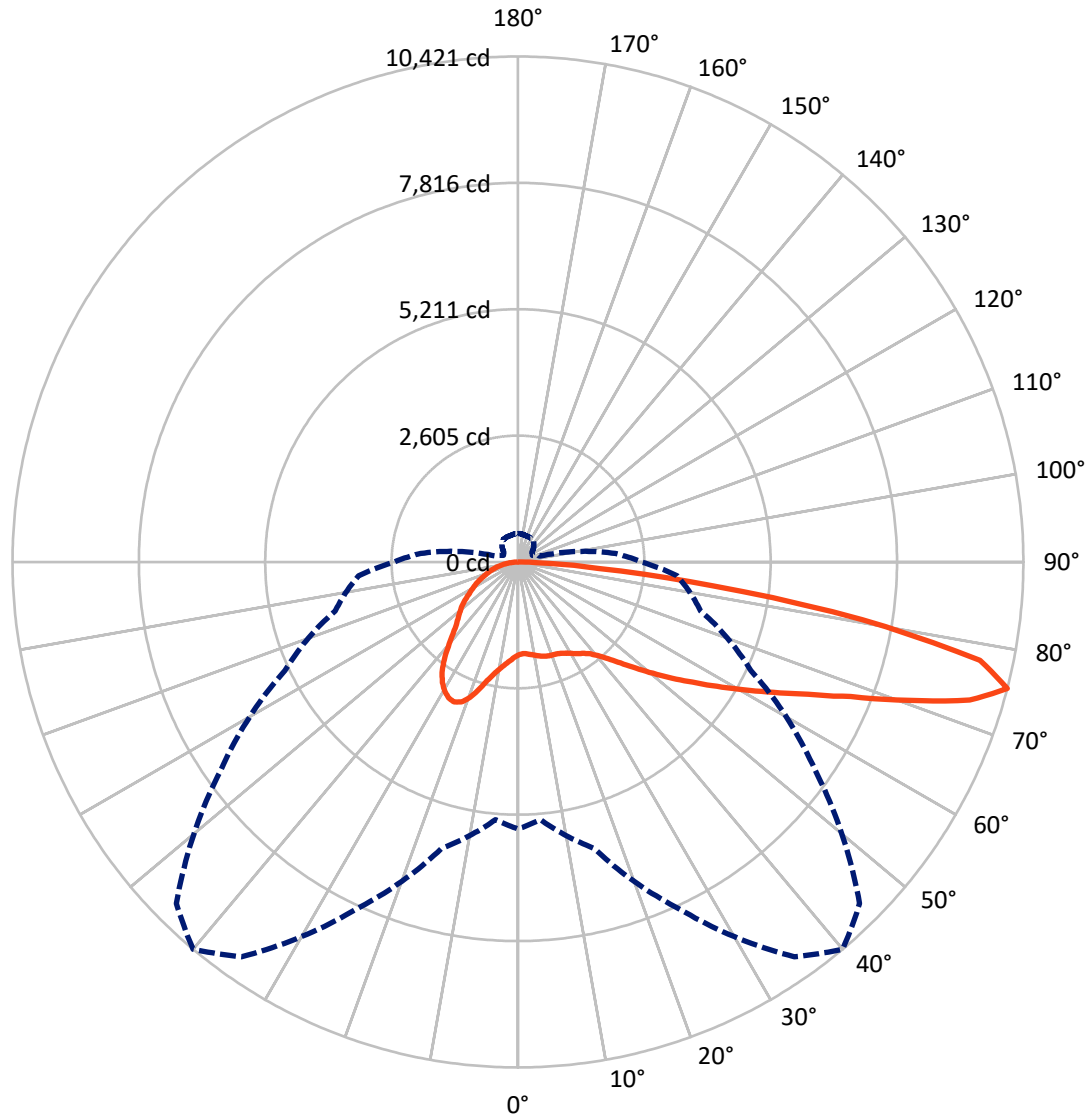
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P883084
CATALOG NUMBER: NAV-SB3B-735-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P883084

CATALOG NUMBER: NAV-SB3B-735-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5187.5	0.0	5187.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	11555.5	0.0	11555.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	16743.0	0.0	16743.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	1.1
10°-20°	641.7	3.8
20°-30°	1171.6	7.0
30°-40°	1661.7	9.9
40°-50°	2243.7	13.4
50°-60°	3018.4	18.0
60°-70°	3831.1	22.9
70°-80°	3476.9	20.8
80°-90°	506.8	3.0
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°	16743.0	100.0
0°-180°	16743.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883084

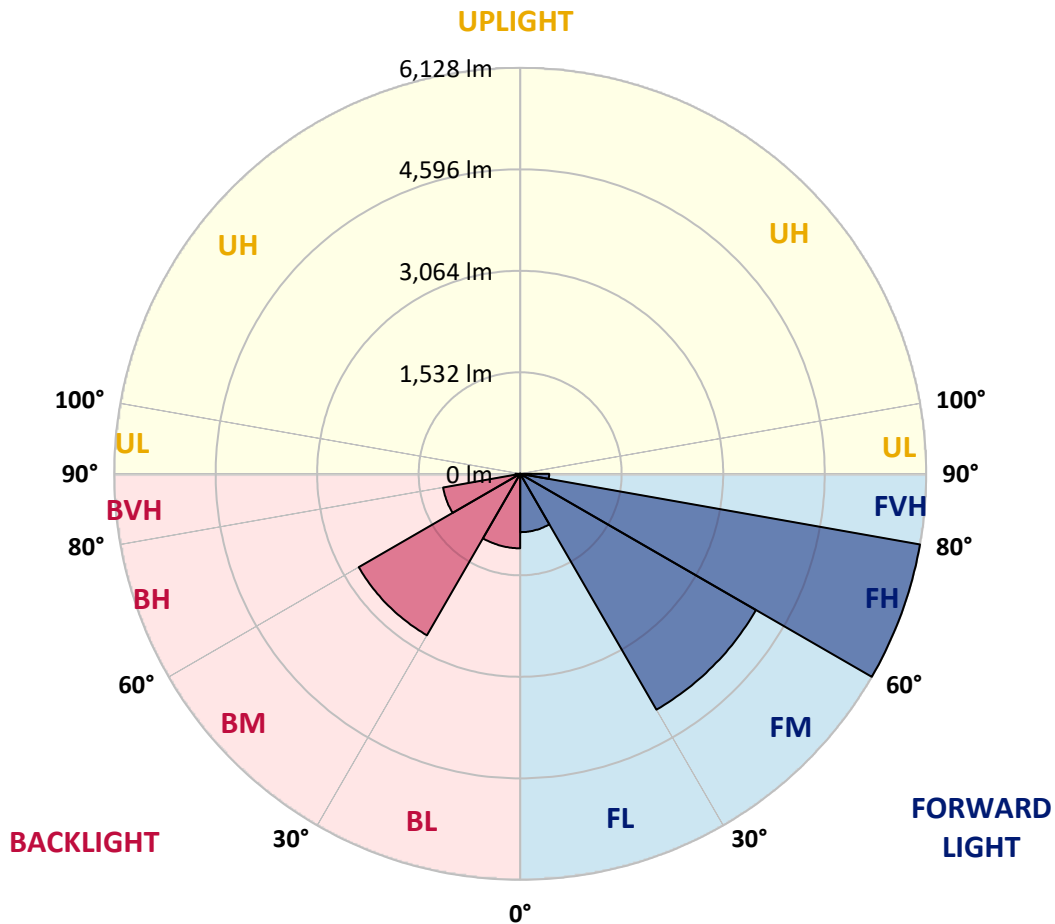
CATALOG NUMBER: NAV-SB3B-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	880.7	5.3			
FM	(30°-60°)	4110.0	24.5			
FH	(60°-80°)	6127.7	36.6			G3/7500
FVH	(80°-90°)	437.0	2.6			G3/500
BL	(0°-30°)	1123.7	6.7	B3/2500		
BM	(30°-60°)	2813.8	16.8	B3/5000		
BH	(60°-80°)	1180.3	7.0	B3/2500		G3/2500
BVH	(80°-90°)	69.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium



REPORT NUMBER: P883084

CATALOG NUMBER: NAV-SB3B-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6
2.5°	1885.3	1895.9	1893.3	1889.7	1889.7	1890.6	1889.7	1895.9	1902.2	1908.4	1918.1
5°	1904.8	1915.5	1910.1	1905.7	1902.2	1901.3	1898.6	1897.7	1901.3	1909.3	1922.6
7.5°	1943.0	1953.7	1945.7	1937.7	1930.6	1927.0	1923.5	1918.1	1915.5	1919.9	1938.6
10°	1985.6	1996.3	1986.5	1972.3	1960.8	1956.3	1952.8	1947.4	1943.9	1946.6	1967.0
12.5°	2028.3	2038.9	2025.6	2006.1	1991.0	1988.3	1983.9	1982.1	1981.2	1980.3	2000.7
15°	2068.2	2077.1	2060.2	2037.1	2021.1	2016.7	2012.3	2014.9	2019.4	2024.7	2047.8
17.5°	2099.3	2108.2	2083.3	2053.1	2038.0	2036.2	2033.6	2042.5	2054.9	2068.2	2096.6
20°	2127.7	2136.6	2104.6	2063.8	2046.0	2046.0	2046.9	2065.5	2083.3	2102.8	2141.9
22.5°	2167.7	2174.8	2135.7	2079.8	2054.0	2055.8	2062.9	2081.5	2103.7	2130.4	2184.5
25°	2227.2	2232.5	2184.5	2110.0	2080.6	2086.0	2092.2	2101.1	2122.4	2153.5	2226.3
27.5°	2323.1	2327.5	2264.5	2163.2	2118.8	2127.7	2136.6	2130.4	2140.1	2166.8	2260.0
30°	2458.1	2460.7	2380.8	2246.7	2183.7	2188.1	2189.9	2164.1	2145.5	2166.8	2284.0
32.5°	2617.9	2617.0	2522.0	2347.9	2257.4	2252.9	2237.8	2187.2	2143.7	2162.3	2305.3
35°	2865.7	2855.9	2733.3	2490.0	2340.8	2313.3	2277.8	2213.0	2152.6	2157.9	2324.0
37.5°	3275.9	3245.7	3076.1	2722.7	2465.2	2395.0	2342.6	2254.7	2172.1	2156.1	2346.2
40°	3738.6	3700.4	3513.9	3041.5	2651.6	2538.9	2454.5	2314.2	2204.1	2164.1	2379.0
42.5°	4287.4	4233.2	4032.5	3417.1	2887.9	2724.5	2597.5	2389.7	2251.1	2189.9	2423.4
45°	4961.4	4889.5	4605.3	3840.7	3185.3	2967.8	2798.2	2504.2	2323.1	2239.6	2490.0
47.5°	5642.5	5660.3	5256.2	4325.6	3542.3	3267.9	3049.5	2676.5	2427.9	2319.5	2597.5
50°	6366.3	6378.7	5903.6	4862.8	3947.3	3607.2	3331.9	2869.2	2573.5	2433.2	2758.2
52.5°	6931.0	6932.8	6491.5	5425.0	4369.1	3980.1	3636.5	3089.4	2742.2	2584.2	2972.2
55°	7284.5	7280.0	6903.5	5956.9	4854.0	4371.8	3973.9	3339.9	2948.2	2761.8	3241.3
57.5°	7541.1	7527.8	7187.7	6414.2	5370.8	4834.4	4355.8	3624.0	3191.6	2973.1	3595.6
60°	7638.8	7630.8	7380.4	6809.4	5914.3	5345.9	4796.2	3941.9	3467.7	3222.6	4051.2
62.5°	7676.1	7691.2	7569.5	7192.1	6495.9	5912.5	5280.2	4322.0	3778.6	3505.0	4531.6
65°	7807.5	7835.1	7810.2	7693.0	7153.1	6575.8	5922.2	4774.0	4117.8	3807.9	5033.3
67.5°	8067.7	8095.2	8105.9	8292.4	7955.8	7402.6	6723.2	5337.0	4514.7	4122.2	5410.7
70°	8061.5	8053.5	8241.8	8769.3	8961.1	8547.3	7803.1	6029.7	4988.0	4383.3	5458.7
72.5°	7337.8	7273.8	7718.7	8763.9	9797.6	9742.5	9121.8	6923.1	5396.5	4415.3	4736.7
75°	5504.9	5334.4	6120.3	7898.1	9937.0	10421.0	9960.1	7477.2	5299.7	3901.1	3296.4
77.5°	2354.2	2182.8	3109.0	5846.8	8893.6	9741.6	9191.1	6523.4	4230.6	2579.7	1618.9
80°	616.3	615.4	939.5	2650.8	6048.3	7193.9	6311.2	4212.8	2417.2	921.8	446.7
82.5°	254.9	248.6	345.4	1031.0	2955.4	4037.0	3294.6	1879.1	872.9	249.5	148.3
85°	95.0	94.1	167.8	356.1	1042.5	1665.0	1205.1	480.4	217.6	121.7	66.6
87.5°	26.6	25.8	36.4	123.4	254.0	385.4	206.0	79.0	61.3	48.0	19.5
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: P883084

CATALOG NUMBER: NAV-SB3B-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6	1914.6
2.5°	1920.8	1925.2	1933.2	1939.4	1947.4	1956.3	1968.8	1976.7	1984.7	1990.1	1986.5
5°	1928.8	1938.6	1959.0	1979.4	2003.4	2025.6	2051.3	2070.0	2085.1	2089.5	2091.3
7.5°	1946.6	1962.5	1997.2	2031.8	2070.0	2106.4	2143.7	2175.7	2201.4	2211.2	2212.1
10°	1977.6	1998.9	2047.8	2096.6	2147.2	2203.2	2251.1	2297.3	2333.7	2348.8	2349.7
12.5°	2016.7	2043.3	2107.3	2174.8	2244.9	2322.2	2384.4	2441.2	2486.5	2506.9	2506.9
15°	2067.3	2102.0	2183.7	2274.2	2377.2	2484.7	2563.7	2626.8	2677.4	2702.3	2700.5
17.5°	2122.4	2168.6	2271.6	2408.3	2555.7	2696.9	2789.3	2835.5	2887.9	2911.8	2910.9
20°	2175.7	2232.5	2379.9	2578.8	2775.1	2925.2	2999.8	3012.2	3015.7	3018.4	3025.5
22.5°	2230.7	2307.1	2515.8	2793.7	3004.2	3108.1	3118.7	3065.5	2990.9	2956.2	2966.0
25°	2291.1	2392.3	2693.4	3030.8	3201.3	3213.8	3132.1	3002.4	2861.2	2796.4	2806.2
27.5°	2349.7	2490.9	2906.5	3257.3	3343.4	3234.2	3058.4	2874.5	2704.0	2635.7	2643.7
30°	2408.3	2603.7	3141.8	3455.3	3408.2	3183.6	2942.0	2736.9	2565.5	2493.6	2501.6
32.5°	2467.8	2735.1	3412.7	3598.3	3396.7	3076.1	2797.3	2582.4	2431.4	2355.9	2365.7
35°	2535.3	2896.7	3669.3	3676.4	3319.4	2918.1	2606.4	2397.7	2266.2	2205.9	2219.2
37.5°	2623.2	3101.9	3895.8	3696.0	3184.5	2686.3	2369.3	2179.2	2070.9	2043.3	2062.9
40°	2732.5	3348.7	4068.9	3664.9	2984.7	2404.8	2110.0	1958.1	1896.8	1903.0	1924.4
42.5°	2874.5	3624.9	4190.6	3585.0	2706.7	2114.4	1882.6	1815.1	1844.4	1869.3	1892.4
45°	3059.3	3911.8	4266.1	3449.1	2392.3	1868.4	1748.5	1764.5	1786.7	1789.4	1807.1
47.5°	3295.5	4202.1	4315.8	3244.0	2071.8	1695.2	1663.3	1666.8	1662.4	1643.7	1657.9
50°	3590.3	4484.5	4360.2	2972.2	1799.1	1586.9	1544.3	1531.8	1470.6	1410.2	1418.2
52.5°	3926.0	4743.8	4378.9	2634.8	1586.9	1496.3	1427.1	1348.9	1234.4	1215.7	1221.9
55°	4298.9	4983.6	4330.9	2220.1	1408.4	1380.0	1275.2	1181.1	1168.6	1152.7	1155.3
57.5°	4744.7	5242.0	4233.2	1757.4	1225.5	1244.1	1142.0	1152.7	1130.5	1105.6	1101.2
60°	5232.3	5509.3	4061.8	1335.6	1036.3	1074.5	1107.4	1106.5	1100.3	1079.8	1072.7
62.5°	5670.9	5685.1	3724.4	1023.0	870.3	943.1	1032.8	1031.9	1026.6	1015.0	1010.6
65°	5932.0	5658.5	3161.4	805.4	733.5	834.7	931.5	938.6	939.5	938.6	938.6
67.5°	5885.8	5346.8	2388.8	641.2	620.7	724.6	831.2	841.0	848.1	849.8	851.6
70°	5363.7	4662.1	1557.6	511.5	520.4	627.8	736.2	745.9	752.2	759.3	762.8
72.5°	4180.8	3427.8	891.6	413.8	432.5	544.4	642.0	653.6	657.1	670.5	675.8
75°	2547.7	2015.8	481.3	325.9	355.2	465.3	548.8	562.1	568.3	584.3	586.1
77.5°	1211.3	872.9	274.4	254.0	285.9	380.1	463.5	478.6	461.8	470.7	463.5
80°	409.4	324.1	173.2	193.6	218.5	296.6	371.2	386.3	350.8	349.0	345.4
82.5°	143.0	131.4	110.1	128.8	141.2	212.2	280.6	300.2	261.1	260.2	247.8
85°	55.9	53.3	61.3	70.2	84.4	130.5	184.7	194.5	160.7	129.7	127.9
87.5°	11.5	12.4	15.1	16.0	25.8	45.3	66.6	81.7	64.8	55.1	50.6
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)