

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: P883134

Luminaire Tested: **NAV-SB3B-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883134
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 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: 14650 lumens
Efficiency: N/A
Efficacy: 134.2 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

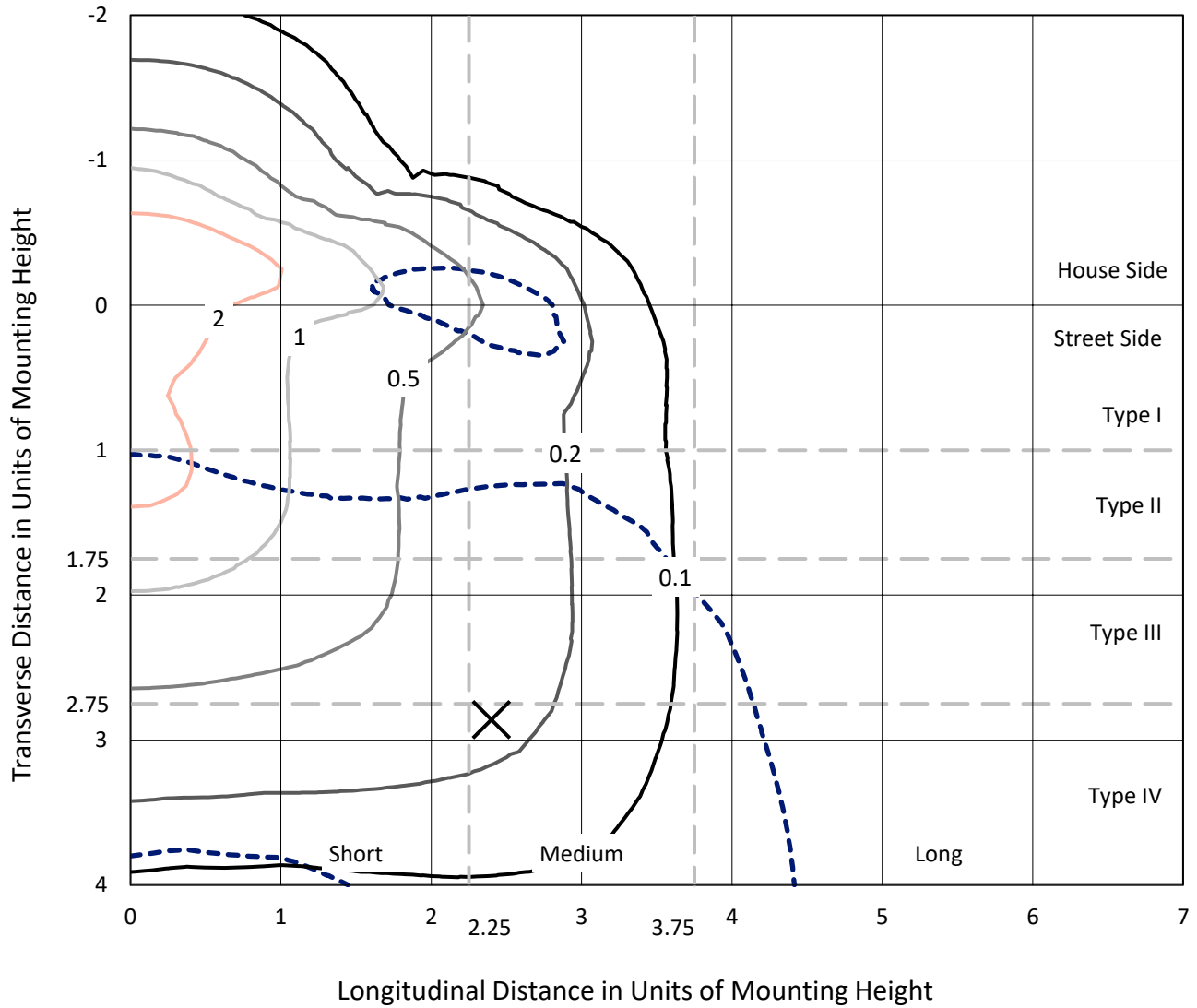
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

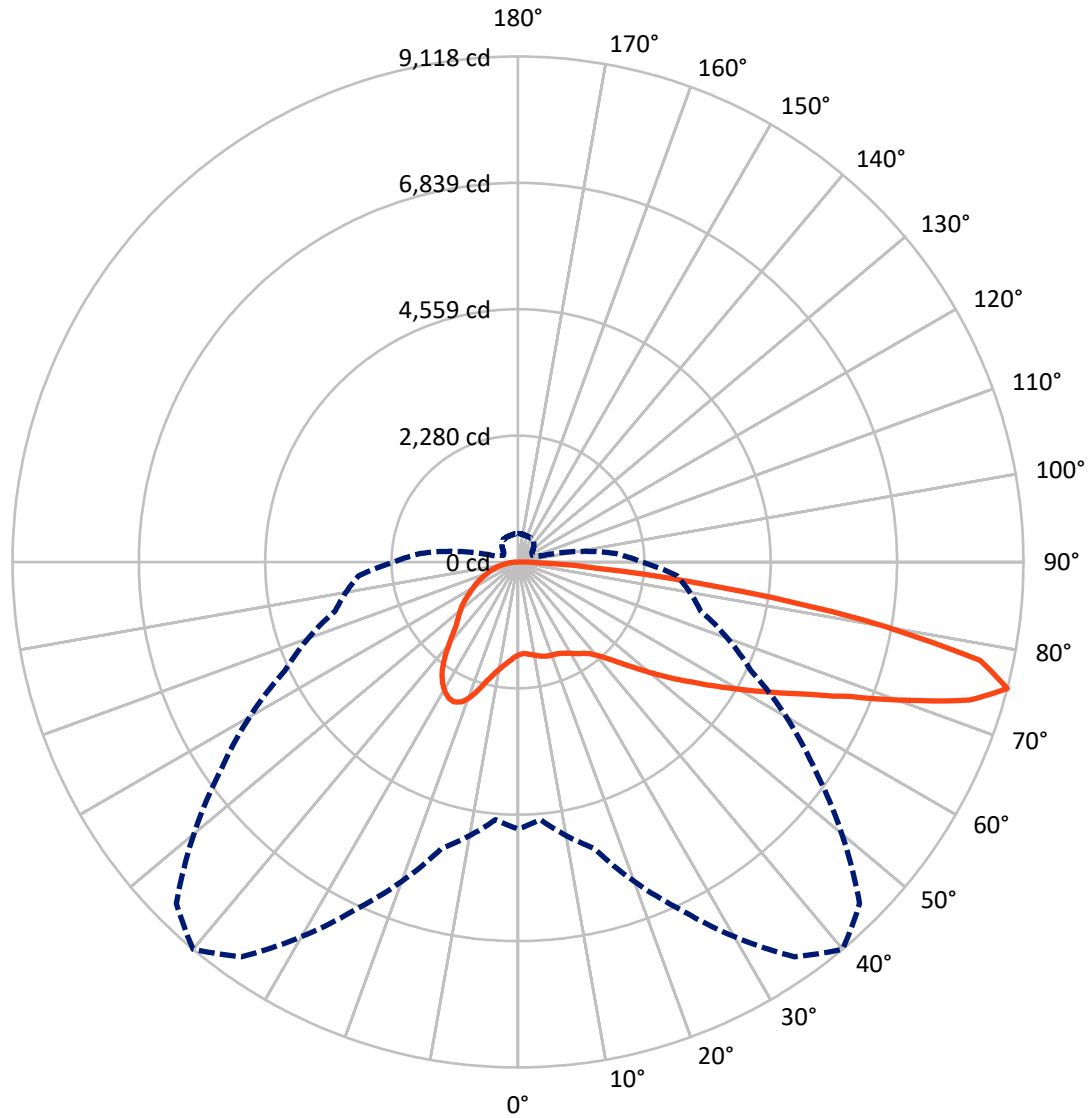
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4539.1	0.0	4539.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	10110.9	0.0	10110.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	14650.0	0.0	14650.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.2	1.1
10°-20°	561.4	3.8
20°-30°	1025.1	7.0
30°-40°	1453.9	9.9
40°-50°	1963.2	13.4
50°-60°	2641.1	18.0
60°-70°	3352.2	22.9
70°-80°	3042.3	20.8
80°-90°	443.5	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°	14650.0	100.0
0°-180°	14650.0	100.0

Coefficient of Utilization



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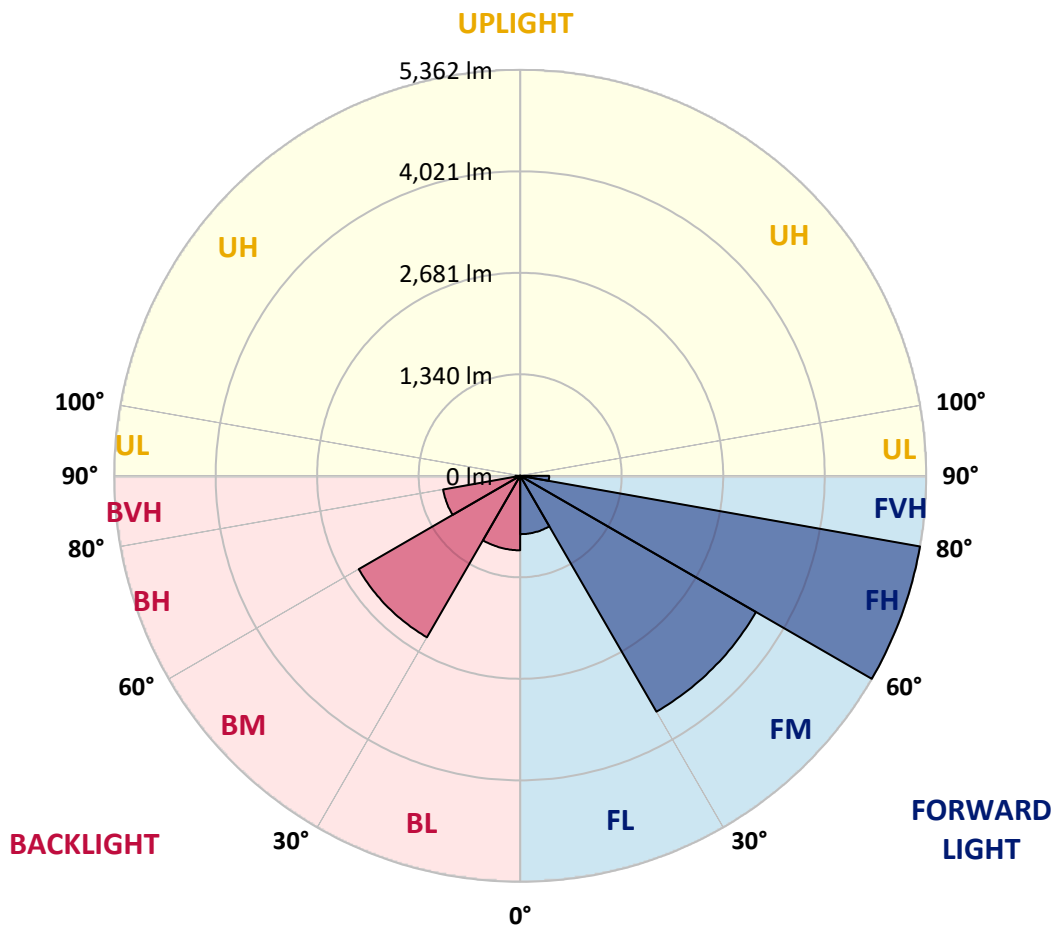
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	770.6	5.3			
FM (30°-60°)	3596.2	24.5			
FH (60°-80°)	5361.7	36.6			G3/7500
FVH (80°-90°)	382.4	2.6			G3/500
BL (0°-30°)	983.2	6.7	B2/1000		
BM (30°-60°)	2462.0	16.8	B2/2500		
BH (60°-80°)	1032.8	7.0	B3/2500		G3/2500
BVH (80°-90°)	61.1	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2
2.5°	1649.6	1658.9	1656.6	1653.5	1653.5	1654.3	1653.5	1658.9	1664.4	1669.8	1678.4
5°	1666.7	1676.0	1671.4	1667.5	1664.4	1663.6	1661.3	1660.5	1663.6	1670.6	1682.2
7.5°	1700.1	1709.4	1702.4	1695.4	1689.2	1686.1	1683.0	1678.4	1676.0	1679.9	1696.2
10°	1737.4	1746.7	1738.2	1725.8	1715.7	1711.8	1708.7	1704.0	1700.9	1703.2	1721.1
12.5°	1774.7	1784.0	1772.4	1755.3	1742.1	1739.7	1735.9	1734.3	1733.5	1732.7	1750.6
15°	1809.7	1817.4	1802.7	1782.5	1768.5	1764.6	1760.7	1763.0	1766.9	1771.6	1791.8
17.5°	1836.9	1844.6	1822.9	1796.5	1783.3	1781.7	1779.4	1787.1	1798.0	1809.7	1834.5
20°	1861.7	1869.5	1841.5	1805.8	1790.2	1790.2	1791.0	1807.3	1822.9	1840.0	1874.2
22.5°	1896.7	1902.9	1868.7	1819.8	1797.2	1798.8	1805.0	1821.3	1840.8	1864.1	1911.5
25°	1948.8	1953.4	1911.5	1846.2	1820.5	1825.2	1830.7	1838.4	1857.1	1884.3	1948.0
27.5°	2032.7	2036.6	1981.4	1892.8	1854.0	1861.7	1869.5	1864.1	1872.6	1895.9	1977.5
30°	2150.8	2153.1	2083.2	1965.9	1910.7	1914.6	1916.1	1893.6	1877.3	1895.9	1998.5
32.5°	2290.6	2289.9	2206.7	2054.4	1975.2	1971.3	1958.1	1913.8	1875.7	1892.0	2017.1
35°	2507.4	2498.9	2391.7	2178.8	2048.2	2024.1	1993.0	1936.3	1883.5	1888.1	2033.5
37.5°	2866.4	2840.0	2691.6	2382.3	2157.0	2095.6	2049.8	1972.8	1900.6	1886.6	2052.9
40°	3271.2	3237.8	3074.7	2661.3	2320.2	2221.5	2147.7	2024.9	1928.6	1893.6	2081.6
42.5°	3751.4	3704.0	3528.4	2990.0	2526.9	2383.9	2272.8	2091.0	1969.7	1916.1	2120.5
45°	4341.2	4278.3	4029.6	3360.6	2787.2	2596.8	2448.4	2191.2	2032.7	1959.6	2178.8
47.5°	4937.2	4952.7	4599.2	3784.8	3099.5	2859.4	2668.3	2341.9	2124.4	2029.6	2272.8
50°	5570.4	5581.3	5165.6	4254.9	3453.8	3156.2	2915.4	2510.5	2251.8	2129.0	2413.4
52.5°	6064.6	6066.2	5680.0	4746.8	3822.9	3482.6	3181.9	2703.2	2399.4	2261.1	2600.7
55°	6373.9	6370.0	6040.5	5212.2	4247.2	3825.3	3477.1	2922.4	2579.7	2416.5	2836.1
57.5°	6598.4	6586.8	6289.2	5612.4	4699.4	4230.1	3811.3	3171.0	2792.6	2601.5	3146.1
60°	6683.9	6676.9	6457.8	5958.2	5174.9	4677.6	4196.7	3449.2	3034.2	2819.8	3544.7
62.5°	6716.5	6729.7	6623.3	6293.1	5683.9	5173.4	4620.1	3781.7	3306.2	3066.9	3965.1
65°	6831.5	6855.6	6833.9	6731.3	6258.9	5753.8	5181.9	4177.2	3603.0	3331.8	4404.1
67.5°	7059.2	7083.3	7092.6	7255.8	6961.3	6477.2	5882.8	4669.9	3950.4	3606.9	4734.4
70°	7053.8	7046.8	7211.5	7673.0	7840.9	7478.8	6827.6	5275.9	4364.5	3835.4	4776.3
72.5°	6420.5	6364.5	6753.8	7668.4	8572.8	8524.6	7981.5	6057.6	4721.9	3863.3	4144.6
75°	4816.7	4667.5	5355.2	6910.8	8694.8	9118.3	8715.0	6542.5	4637.2	3413.4	2884.3
77.5°	2059.9	1909.9	2720.3	5115.9	7781.8	8523.9	8042.1	5708.0	3701.7	2257.2	1416.5
80°	539.2	538.5	822.1	2319.4	5292.3	6294.6	5522.3	3686.2	2115.0	806.5	390.8
82.5°	223.0	217.6	302.3	902.1	2585.9	3532.3	2882.7	1644.2	763.8	218.3	129.8
85°	83.1	82.4	146.9	311.6	912.2	1456.9	1054.4	420.4	190.4	106.5	58.3
87.5°	23.3	22.5	31.9	108.0	222.2	337.2	180.3	69.2	53.6	42.0	17.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2	1675.2
2.5°	1680.7	1684.6	1691.6	1697.0	1704.0	1711.8	1722.6	1729.6	1736.6	1741.3	1738.2
5°	1687.7	1696.2	1714.1	1732.0	1752.9	1772.4	1794.9	1811.2	1824.4	1828.3	1829.9
7.5°	1703.2	1717.2	1747.5	1777.8	1811.2	1843.1	1875.7	1903.7	1926.2	1934.8	1935.5
10°	1730.4	1749.1	1791.8	1834.5	1878.8	1927.8	1969.7	2010.1	2042.0	2055.2	2056.0
12.5°	1764.6	1787.9	1843.9	1902.9	1964.3	2031.9	2086.3	2136.0	2175.6	2193.5	2193.5
15°	1808.9	1839.2	1910.7	1989.9	2080.1	2174.1	2243.2	2298.4	2342.7	2364.5	2362.9
17.5°	1857.1	1897.5	1987.6	2107.3	2236.3	2359.8	2440.6	2481.0	2526.9	2547.8	2547.1
20°	1903.7	1953.4	2082.4	2256.5	2428.2	2559.5	2624.8	2635.6	2638.7	2641.1	2647.3
22.5°	1951.9	2018.7	2201.3	2444.5	2628.6	2719.6	2728.9	2682.3	2617.0	2586.7	2595.2
25°	2004.7	2093.3	2356.7	2652.0	2801.1	2812.0	2740.5	2627.1	2503.5	2446.8	2455.4
27.5°	2056.0	2179.5	2543.2	2850.1	2925.5	2829.9	2676.0	2515.2	2366.0	2306.2	2313.2
30°	2107.3	2278.2	2749.1	3023.4	2982.2	2785.6	2574.3	2394.8	2244.8	2181.9	2188.9
32.5°	2159.3	2393.2	2986.1	3148.5	2972.1	2691.6	2447.6	2259.6	2127.5	2061.4	2070.0
35°	2218.4	2534.6	3210.6	3216.8	2904.5	2553.3	2280.5	2097.9	1982.9	1930.1	1941.8
37.5°	2295.3	2714.1	3408.8	3233.9	2786.4	2350.5	2073.1	1906.8	1812.0	1787.9	1805.0
40°	2390.9	2930.1	3560.3	3206.7	2611.6	2104.2	1846.2	1713.3	1659.7	1665.1	1683.8
42.5°	2515.2	3171.8	3666.7	3136.8	2368.3	1850.1	1647.3	1588.2	1613.9	1635.6	1655.8
45°	2676.8	3422.8	3732.8	3017.9	2093.3	1634.8	1529.9	1543.9	1563.4	1565.7	1581.2
47.5°	2883.5	3676.8	3776.3	2838.4	1812.8	1483.3	1455.4	1458.5	1454.6	1438.3	1450.7
50°	3141.5	3923.9	3815.1	2600.7	1574.2	1388.5	1351.2	1340.4	1286.7	1233.9	1240.9
52.5°	3435.2	4150.8	3831.5	2305.4	1388.5	1309.3	1248.7	1180.3	1080.1	1063.7	1069.2
55°	3761.5	4360.6	3789.5	1942.5	1232.3	1207.5	1115.8	1033.4	1022.6	1008.6	1010.9
57.5°	4151.6	4586.7	3704.0	1537.7	1072.3	1088.6	999.2	1008.6	989.1	967.4	963.5
60°	4578.2	4820.6	3554.1	1168.6	906.8	940.2	968.9	968.2	962.7	944.9	938.6
62.5°	4962.0	4974.5	3258.8	895.1	761.5	825.2	903.7	902.9	898.2	888.1	884.2
65°	5190.5	4951.1	2766.2	704.8	641.8	730.4	815.1	821.3	822.1	821.3	821.3
67.5°	5150.1	4678.4	2090.2	561.0	543.1	634.0	727.3	735.8	742.1	743.6	745.2
70°	4693.2	4079.3	1362.9	447.6	455.3	549.4	644.1	652.7	658.1	664.3	667.5
72.5°	3658.2	2999.3	780.1	362.1	378.4	476.3	561.8	571.9	575.0	586.6	591.3
75°	2229.3	1763.8	421.1	285.2	310.8	407.2	480.2	491.9	497.3	511.3	512.8
77.5°	1059.9	763.8	240.1	222.2	250.2	332.6	405.6	418.8	404.0	411.8	405.6
80°	358.2	283.6	151.5	169.4	191.1	259.5	324.8	338.0	306.9	305.4	302.3
82.5°	125.1	115.0	96.4	112.7	123.5	185.7	245.5	262.6	228.4	227.7	216.8
85°	49.0	46.6	53.6	61.4	73.8	114.2	161.6	170.2	140.6	113.4	111.9
87.5°	10.1	10.9	13.2	14.0	22.5	39.6	58.3	71.5	56.7	48.2	44.3
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)