

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: P961550

Luminaire Tested: **NAV-SB2A-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8212.3 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

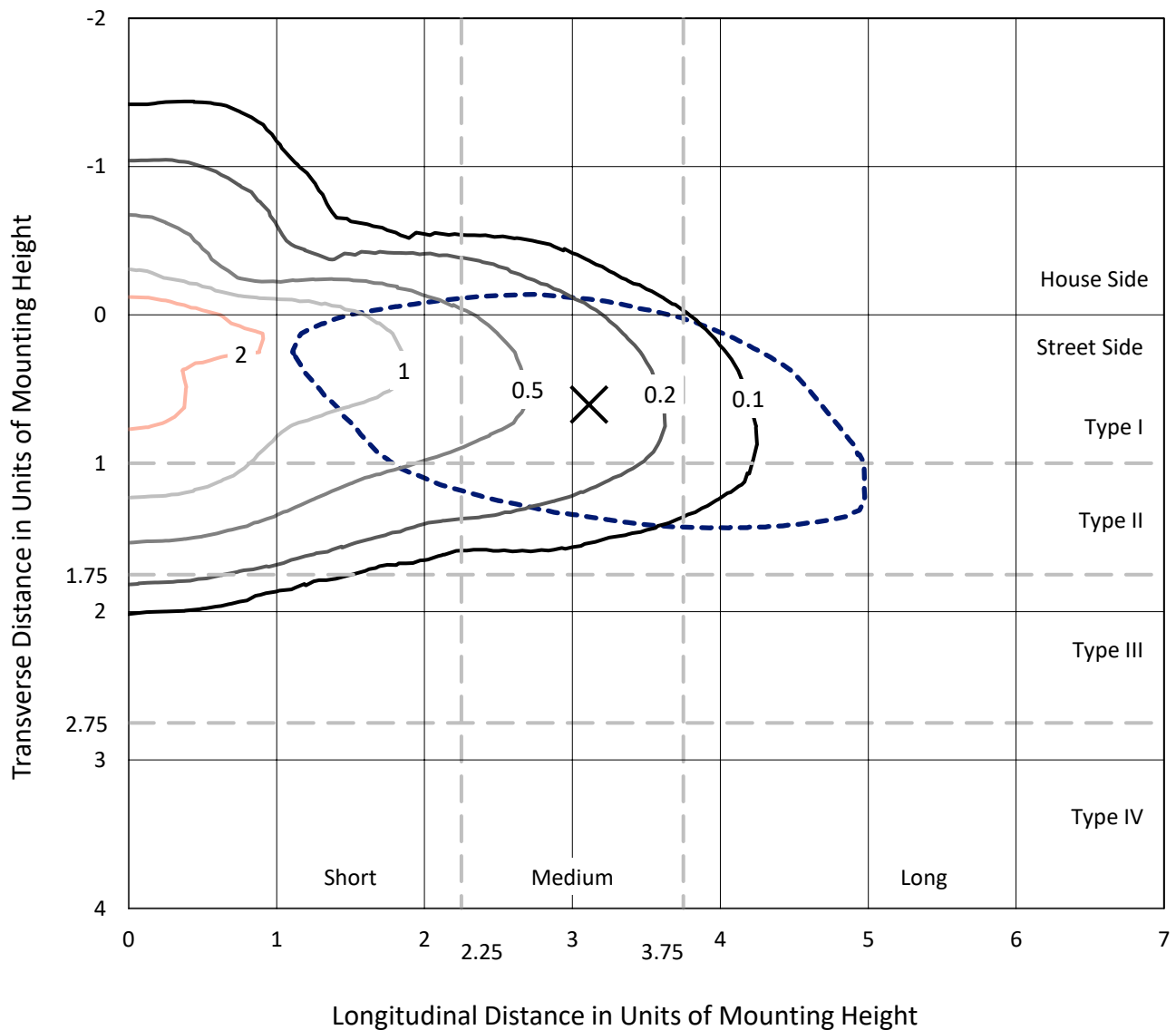
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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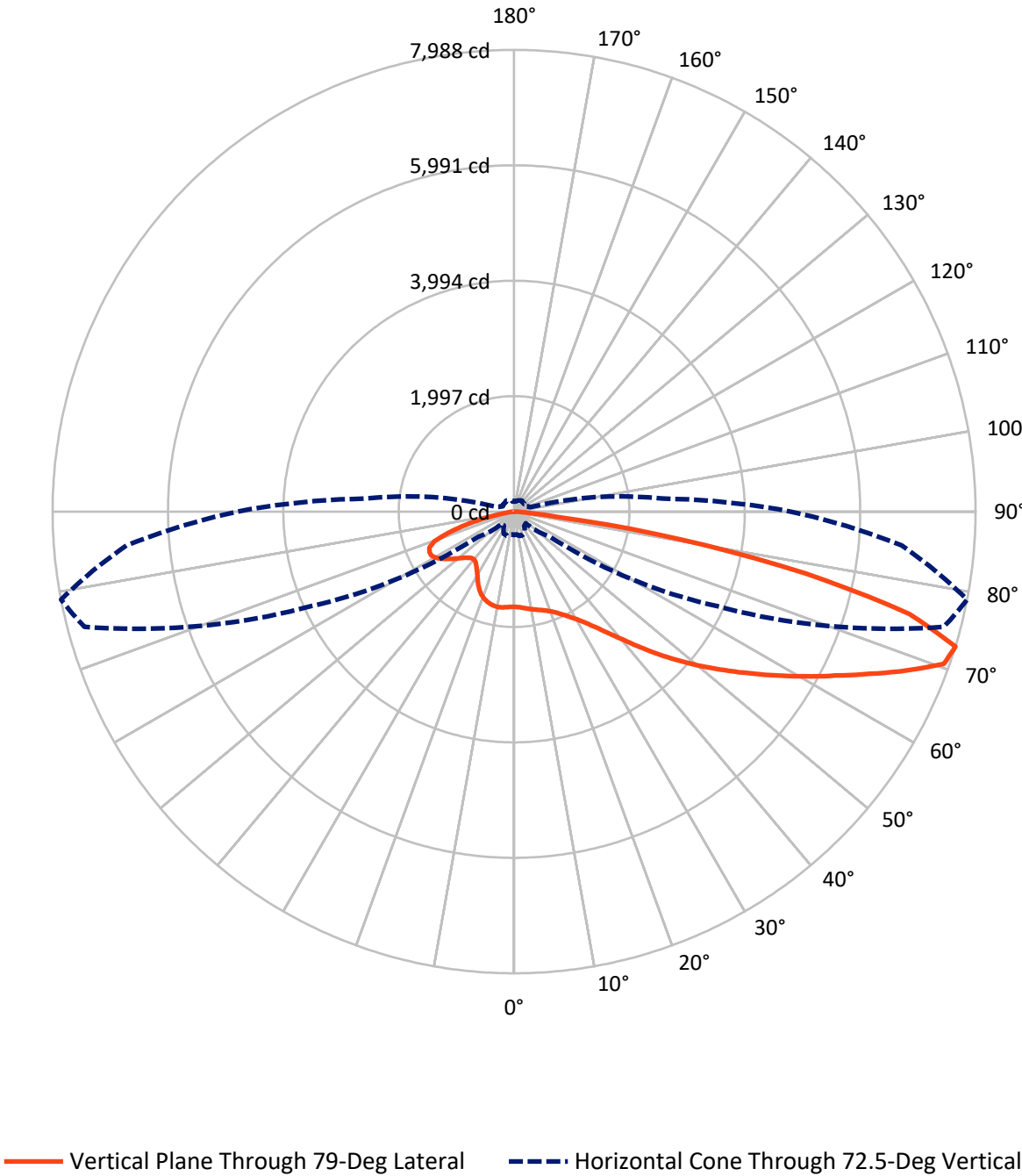
Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1807.2	0.0	1807.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	6405.1	0.0	6405.1
	% Fixture	78.0	0.0	78.0
Total	Lumens	8212.3	0.0	8212.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.6	1.8
10°-20°	391.2	4.8
20°-30°	631.3	7.7
30°-40°	947.5	11.5
40°-50°	1344.1	16.4
50°-60°	1697.4	20.7
60°-70°	1723.9	21.0
70°-80°	1174.9	14.3
80°-90°	152.4	1.9
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°	8212.3	100.0
0°-180°	8212.3	100.0

Coefficient of Utilization



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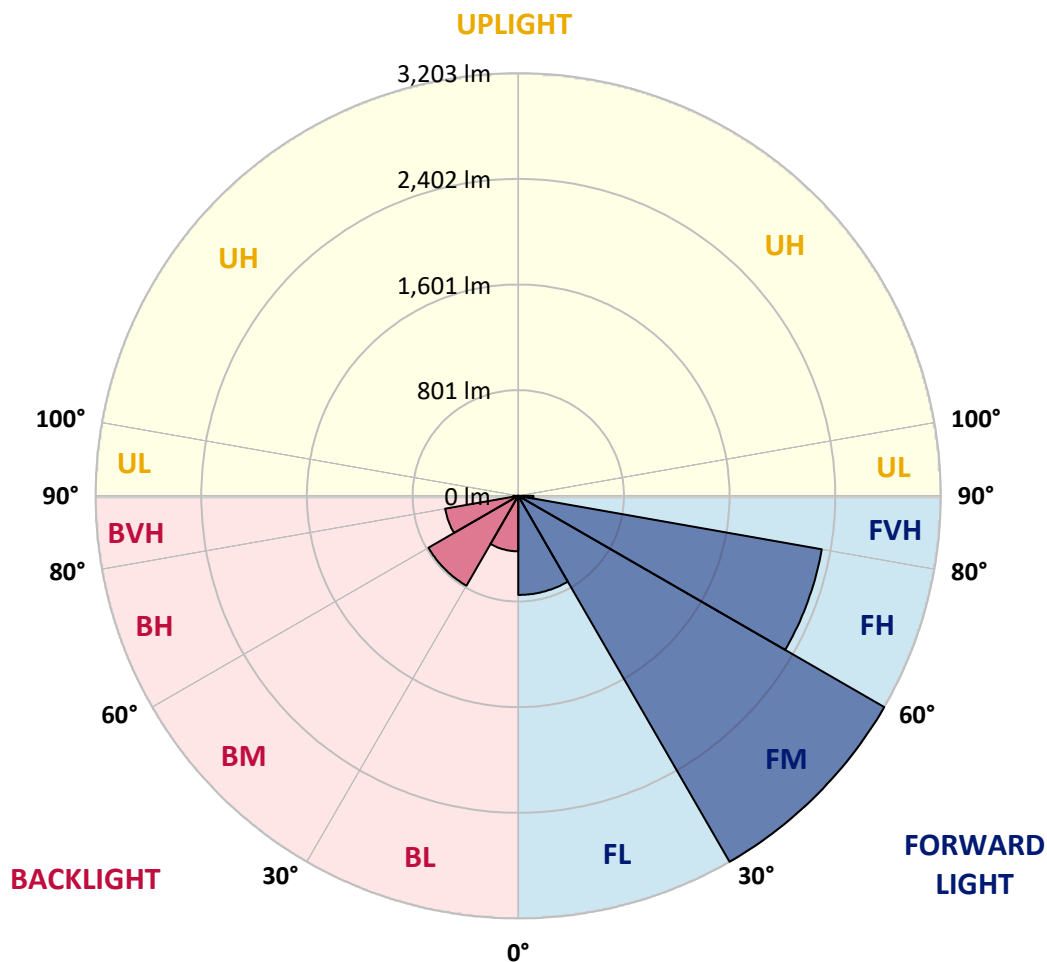
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	751.2	9.1			
FM	(30°-60°)	3203.0	39.0			
FH	(60°-80°)	2336.1	28.4			G2/5000
FVH	(80°-90°)	114.8	1.4			G2/225
BL	(0°-30°)	420.9	5.1	B1/500		
BM	(30°-60°)	785.9	9.6	B1/1000		
BH	(60°-80°)	562.7	6.9	B2/1000		G2/1000
BVH	(80°-90°)	37.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5
2.5°	1649.4	1641.6	1646.4	1644.6	1646.8	1649.4	1650.2	1651.6	1655.9	1655.5	1655.1
5°	1645.9	1638.2	1644.6	1642.5	1648.1	1654.1	1659.4	1664.2	1671.2	1674.1	1669.8
7.5°	1638.6	1633.3	1639.9	1646.4	1656.8	1665.9	1673.3	1684.2	1694.1	1695.9	1698.9
10°	1595.5	1591.6	1606.8	1623.8	1652.4	1677.2	1693.3	1705.9	1716.8	1718.5	1722.8
12.5°	1550.8	1546.0	1562.9	1586.0	1632.5	1677.2	1711.1	1727.6	1737.2	1742.8	1749.4
15°	1543.4	1539.6	1549.1	1569.1	1607.7	1665.5	1723.2	1753.7	1761.9	1768.4	1771.0
17.5°	1579.0	1571.6	1575.5	1582.5	1605.1	1654.7	1732.9	1783.2	1795.8	1802.8	1802.8
20°	1661.5	1651.2	1645.0	1631.2	1627.3	1656.4	1731.9	1818.9	1835.4	1844.0	1846.2
22.5°	1771.5	1764.5	1751.5	1716.3	1678.1	1677.6	1748.4	1864.5	1895.3	1903.5	1898.3
25°	1904.4	1894.0	1877.5	1829.7	1756.2	1719.7	1776.2	1922.7	1974.4	1976.5	1961.3
27.5°	2057.3	2041.7	2019.0	1956.1	1857.1	1785.9	1818.9	1989.5	2065.2	2064.2	2033.0
30°	2218.5	2202.8	2178.9	2102.5	1977.8	1874.8	1877.9	2061.7	2172.9	2168.1	2114.7
32.5°	2336.2	2324.5	2319.7	2260.6	2116.8	1980.0	1945.7	2141.5	2305.7	2301.4	2226.7
35°	2426.6	2411.3	2417.0	2387.0	2268.4	2097.7	2028.7	2236.8	2467.4	2467.0	2374.0
37.5°	2516.1	2502.5	2507.4	2487.4	2408.8	2247.1	2129.8	2353.1	2667.7	2677.2	2552.0
40°	2597.7	2583.4	2602.5	2583.8	2517.8	2406.1	2245.0	2484.8	2899.6	2917.9	2767.5
42.5°	2646.8	2635.5	2667.3	2667.7	2612.5	2540.4	2371.3	2629.8	3168.1	3208.9	3032.6
45°	2663.8	2659.8	2707.6	2717.6	2696.3	2618.2	2485.2	2788.0	3457.3	3530.3	3334.4
47.5°	2645.5	2638.1	2704.2	2741.1	2758.0	2654.6	2579.4	2959.1	3752.7	3859.6	3663.8
50°	2553.4	2539.0	2637.2	2715.0	2775.4	2678.5	2674.6	3156.8	4088.5	4205.4	3994.7
52.5°	2387.8	2377.1	2488.7	2623.8	2737.2	2690.2	2781.4	3372.7	4407.4	4558.6	4334.0
55°	2176.4	2162.0	2284.9	2461.3	2642.0	2686.3	2888.3	3614.2	4783.6	4936.9	4684.6
57.5°	1841.0	1812.3	1967.8	2176.4	2487.0	2681.5	2999.6	3854.4	5165.9	5349.6	5058.6
60°	1351.9	1309.2	1500.0	1747.1	2183.8	2635.1	3137.2	4123.8	5624.6	5790.1	5466.9
62.5°	787.1	762.4	887.0	1117.7	1645.9	2361.4	3214.5	4436.9	6075.5	6249.2	5868.3
65°	611.2	604.2	615.1	632.9	916.1	1768.0	2976.1	4742.4	6648.9	6770.5	6286.6
67.5°	559.0	553.8	558.6	525.2	464.8	984.8	2354.4	4819.7	7263.2	7337.0	6652.8
70°	496.9	490.9	506.6	477.9	365.7	447.8	1521.3	4539.0	7751.9	7890.4	6931.3
72.5°	404.9	397.9	434.4	421.4	308.0	287.6	764.1	3872.2	7700.6	7988.1	6731.9
75°	311.0	307.1	350.5	361.4	251.1	226.3	366.6	2878.3	6776.6	7066.4	5801.8
77.5°	241.5	238.5	260.7	300.1	202.4	175.5	225.5	1825.7	5106.8	5157.6	3998.2
80°	181.1	172.4	192.9	232.4	157.6	128.1	152.9	1064.7	3228.0	2926.1	1740.2
82.5°	113.4	109.1	126.0	155.1	111.2	88.1	99.5	588.1	1293.7	762.0	335.8
85°	64.7	63.0	68.7	88.7	60.4	50.8	56.9	259.7	236.3	162.5	101.2
87.5°	26.0	25.2	31.3	39.6	22.1	18.7	20.0	62.5	52.2	48.2	33.4
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°	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5	1648.5
2.5°	1653.3	1653.3	1647.3	1637.6	1626.8	1619.9	1608.5	1605.6	1593.8	1590.3	1596.0
5°	1673.3	1669.8	1651.2	1624.2	1587.3	1553.4	1516.1	1492.6	1459.6	1447.8	1456.5
7.5°	1698.5	1688.9	1656.8	1597.7	1520.4	1444.3	1365.3	1305.3	1248.0	1227.6	1230.2
10°	1721.5	1708.1	1653.3	1549.9	1416.1	1284.5	1158.6	1070.4	1003.5	976.1	982.2
12.5°	1744.6	1719.7	1630.3	1470.5	1268.0	1089.5	955.2	886.6	845.3	812.3	823.2
15°	1766.3	1731.5	1594.7	1364.0	1105.6	924.4	825.3	770.6	737.6	715.9	719.8
17.5°	1791.5	1741.5	1541.3	1228.9	950.9	810.2	729.4	696.4	689.8	687.3	689.0
20°	1826.7	1750.6	1470.9	1077.8	837.1	718.9	677.2	674.1	673.7	672.4	676.8
22.5°	1864.5	1761.5	1377.9	940.4	740.3	662.0	654.7	648.5	644.6	644.2	649.0
25°	1909.2	1764.9	1261.5	828.0	657.6	635.1	626.4	617.3	614.7	614.7	617.3
27.5°	1952.6	1753.3	1126.0	730.2	611.2	610.3	599.0	596.0	595.5	596.9	600.3
30°	1996.1	1731.1	991.3	639.9	584.2	584.2	580.4	582.5	584.2	588.7	591.6
32.5°	2054.7	1707.6	878.8	573.0	560.8	556.5	560.4	564.7	566.4	572.1	576.9
35°	2140.7	1691.1	789.4	536.5	536.5	530.8	533.0	532.2	528.2	525.6	531.7
37.5°	2254.5	1690.2	715.4	519.6	516.1	515.2	515.7	509.9	494.8	476.5	476.9
40°	2391.3	1713.7	658.6	507.8	505.2	510.4	507.8	492.6	450.9	419.2	418.3
42.5°	2575.1	1780.6	622.1	493.4	501.3	507.8	497.4	444.8	416.6	395.3	394.4
45°	2791.5	1889.2	603.4	478.3	493.9	501.7	451.3	428.3	405.7	380.1	378.3
47.5°	3036.5	2026.0	599.0	463.9	477.4	482.2	431.8	421.4	395.8	368.0	365.7
50°	3303.2	2188.1	610.8	447.0	453.6	437.0	425.3	415.7	389.2	361.8	358.9
52.5°	3579.0	2366.6	634.3	423.9	429.6	411.3	422.7	414.4	385.3	348.4	345.7
55°	3850.1	2546.4	656.8	397.1	405.3	388.4	415.3	409.2	367.5	325.8	323.6
57.5°	4125.5	2725.4	679.0	373.1	381.8	366.2	403.5	395.3	347.5	304.9	304.1
60°	4411.7	2899.2	689.4	350.1	356.2	345.7	385.7	371.5	324.9	283.6	282.4
62.5°	4679.7	3043.8	672.4	327.1	331.0	326.7	362.3	343.2	302.4	259.7	259.3
65°	4948.7	3129.8	620.3	304.5	305.3	303.2	329.2	312.7	275.8	238.9	236.3
67.5°	5192.3	3178.0	537.3	280.2	278.0	277.2	298.5	279.7	250.2	218.0	215.5
70°	5244.1	3055.5	410.5	251.5	251.5	249.4	264.6	245.4	222.0	195.9	195.1
72.5°	4789.7	2570.3	291.5	218.9	222.4	218.0	230.6	214.6	193.3	175.9	170.8
75°	3862.2	1884.9	212.0	185.5	191.6	184.2	195.9	184.6	166.4	165.9	149.4
77.5°	2653.7	1165.5	153.8	152.9	157.2	147.7	161.1	155.1	138.6	131.2	122.9
80°	1132.5	464.8	112.0	118.2	118.2	109.5	125.2	126.9	112.5	109.1	109.1
82.5°	225.5	132.0	78.6	81.3	76.5	73.8	88.7	98.2	135.5	150.8	151.2
85°	67.8	48.7	47.4	44.3	39.1	39.6	52.2	98.6	121.7	69.5	60.0
87.5°	18.7	12.2	12.6	9.9	8.3	10.9	17.8	74.7	40.8	17.4	14.8
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)