

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: P883149

Luminaire Tested: **NAV-SB3B-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883149
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14261 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

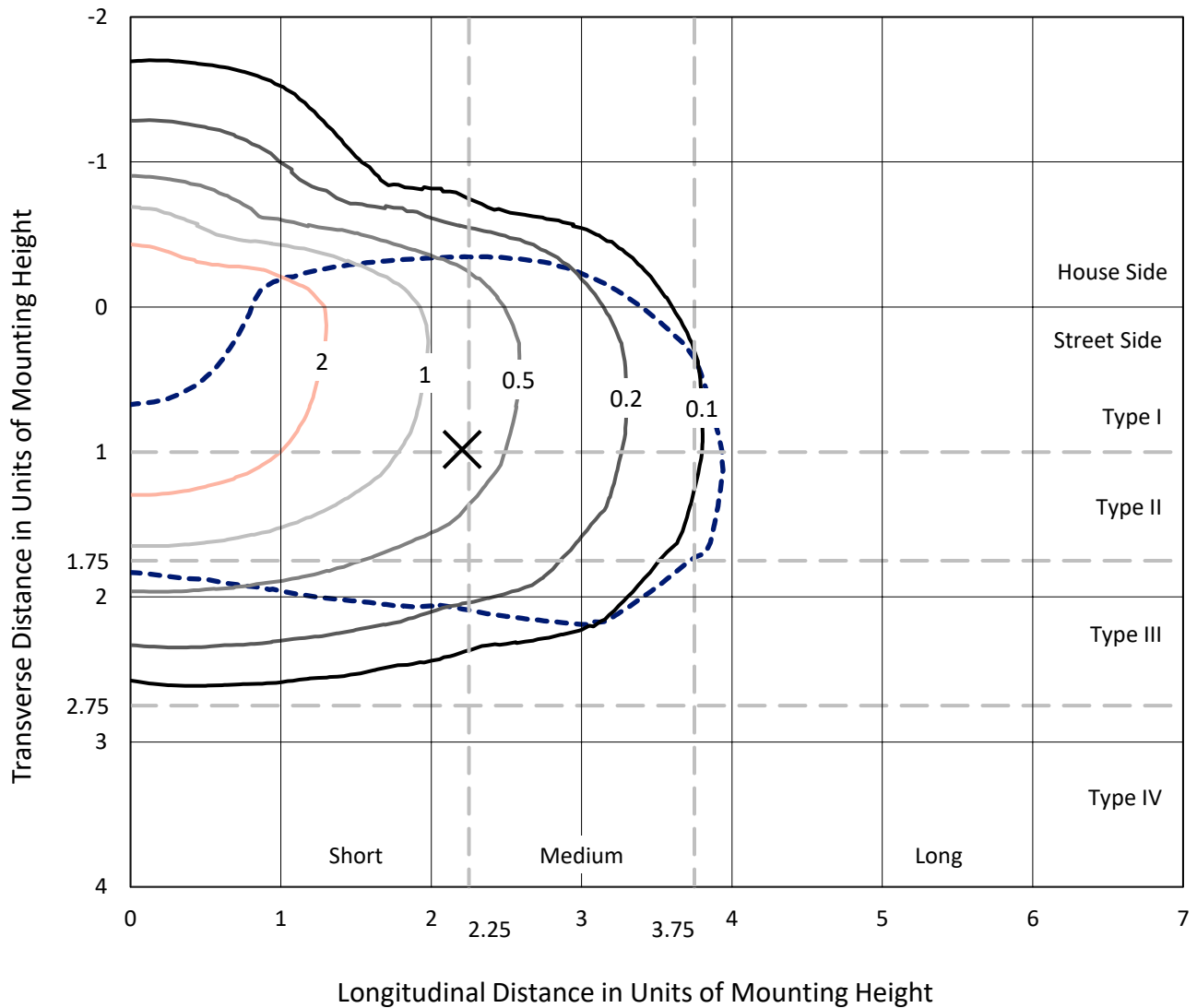
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

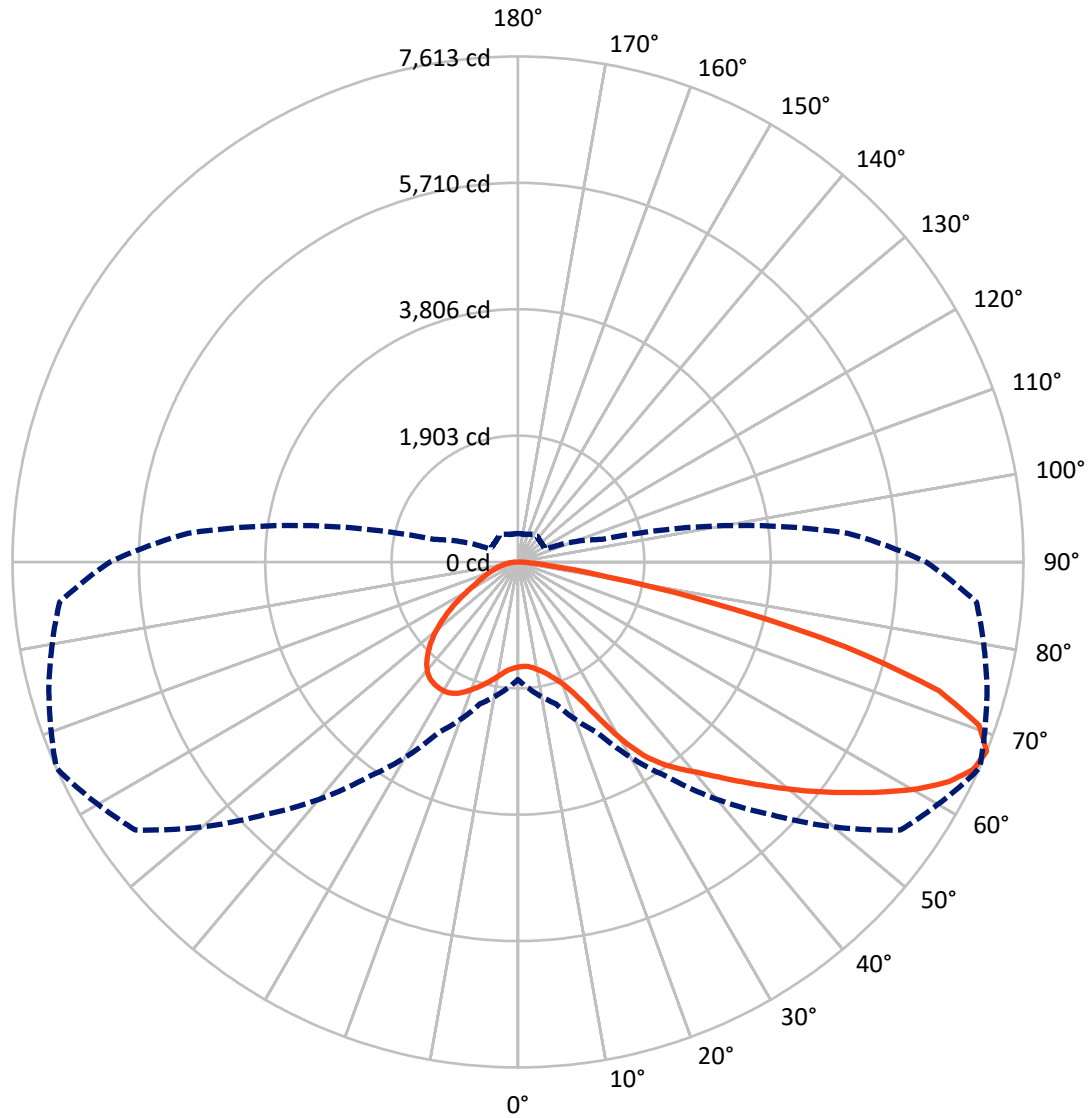
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3545.9	0.0	3545.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	10715.0	0.0	10715.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	14261.0	0.0	14261.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	1.1
10°-20°	518.1	3.6
20°-30°	998.6	7.0
30°-40°	1751.0	12.3
40°-50°	2603.2	18.3
50°-60°	3299.8	23.1
60°-70°	3228.7	22.6
70°-80°	1540.1	10.8
80°-90°	164.6	1.2
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°	14261.0	100.0
0°-180°	14261.0	100.0

Coefficient of Utilization



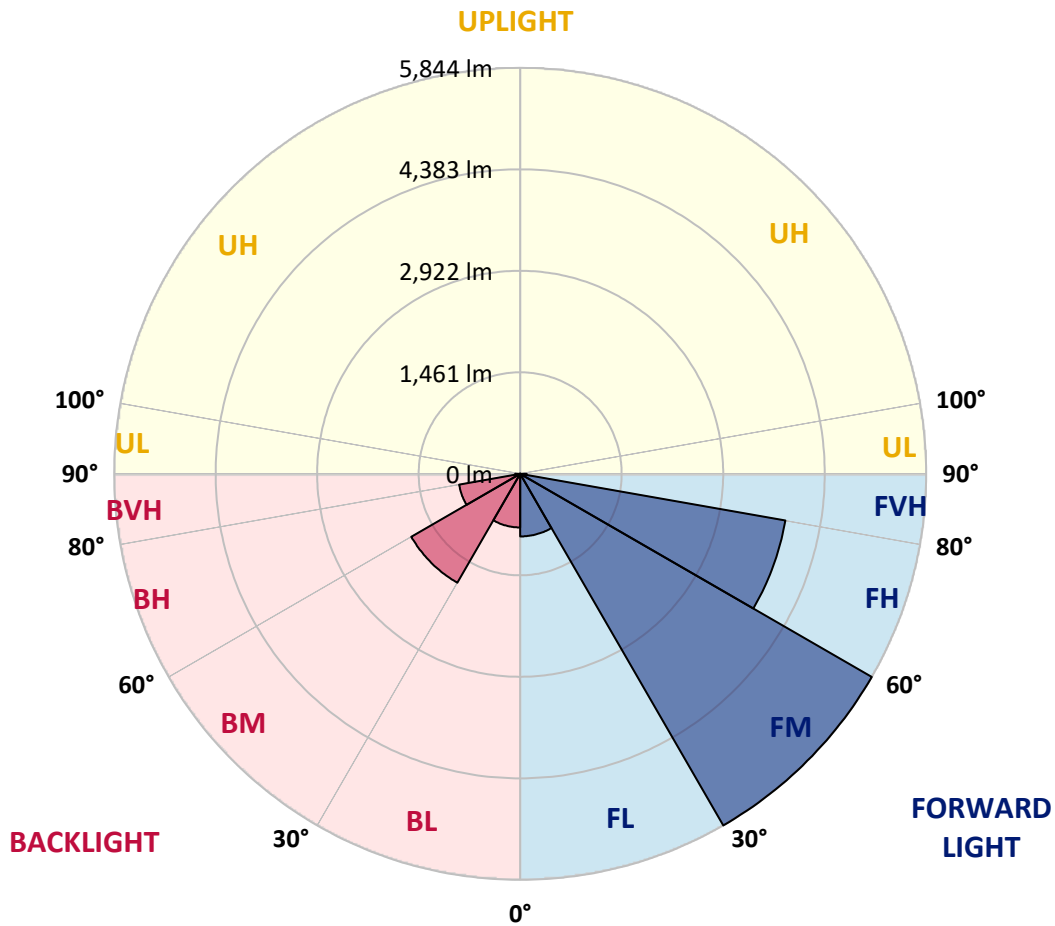
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	901.2	6.3			
FM (30°-60°)	5844.0	41.0			
FH (60°-80°)	3876.5	27.2			G2/5000
FVH (80°-90°)	93.3	0.7			G1/100
BL (0°-30°)	772.4	5.4	B2/1000		
BM (30°-60°)	1809.9	12.7	B2/2500		
BH (60°-80°)	892.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	71.3	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7
2.5°	1565.2	1574.2	1572.0	1568.2	1567.5	1569.0	1571.2	1573.5	1572.7	1576.5	1582.5
5°	1560.8	1569.7	1569.0	1569.0	1572.0	1578.0	1581.7	1585.5	1581.7	1586.2	1594.5
7.5°	1563.8	1570.5	1573.5	1576.5	1584.0	1595.2	1604.2	1612.5	1608.0	1613.2	1623.7
10°	1602.0	1607.2	1610.2	1610.2	1615.5	1628.2	1637.2	1652.2	1648.4	1656.7	1670.1
12.5°	1671.6	1676.9	1676.9	1673.9	1677.6	1685.9	1688.9	1705.4	1698.6	1712.1	1725.6
15°	1757.1	1767.6	1759.3	1754.1	1755.6	1763.8	1763.1	1775.8	1769.1	1780.3	1792.3
17.5°	1851.5	1865.0	1851.5	1850.7	1847.7	1856.7	1857.5	1868.7	1856.7	1865.0	1873.2
20°	1963.1	1981.8	1970.6	1974.4	1967.6	1971.4	1975.1	1991.6	1972.9	1978.9	1976.6
22.5°	2120.5	2142.9	2131.0	2145.2	2140.7	2137.7	2137.0	2166.2	2137.0	2139.2	2117.5
25°	2349.7	2376.7	2355.7	2375.2	2375.2	2385.0	2396.2	2433.7	2385.0	2370.7	2314.5
27.5°	2688.4	2715.4	2674.2	2686.2	2682.4	2706.4	2694.4	2787.3	2734.9	2711.6	2598.5
30°	3096.0	3144.0	3066.1	3063.1	3059.3	3097.5	3114.8	3176.2	3123.0	3099.8	2963.4
32.5°	3536.6	3586.8	3493.9	3466.9	3452.7	3475.9	3461.7	3511.1	3474.4	3438.5	3269.9
35°	4002.7	4052.1	3963.7	3911.2	3854.3	3805.6	3754.6	3767.4	3732.9	3678.2	3503.6
37.5°	4443.2	4533.9	4440.2	4384.0	4279.1	4184.0	4041.6	3982.4	3950.2	3900.0	3723.9
40°	4892.1	4943.8	4872.6	4824.6	4710.7	4561.6	4333.8	4208.7	4165.3	4116.6	3967.4
42.5°	5222.5	5271.9	5233.7	5200.8	5111.6	4938.5	4644.0	4487.4	4424.5	4369.8	4243.2
45°	5484.7	5521.5	5497.5	5509.5	5471.3	5303.4	4965.5	4786.4	4721.2	4654.5	4554.9
47.5°	5590.4	5629.4	5667.6	5738.7	5803.9	5680.3	5310.9	5110.1	5041.2	4973.0	4874.8
50°	5578.4	5618.1	5729.0	5880.4	6082.7	6041.5	5675.1	5454.8	5391.1	5313.2	5222.5
52.5°	5482.5	5527.5	5669.8	5921.6	6243.8	6311.9	6046.0	5810.7	5750.7	5657.8	5567.2
55°	5230.7	5257.7	5471.3	5827.9	6282.0	6500.8	6409.4	6189.8	6129.9	6000.2	5901.3
57.5°	4763.9	4802.9	5113.8	5575.4	6186.1	6628.9	6728.5	6588.4	6530.7	6344.2	6240.8
60°	4154.8	4217.0	4572.9	5151.3	5941.8	6628.1	7018.5	6980.3	6932.4	6682.8	6574.9
62.5°	3465.4	3537.4	3879.8	4551.9	5514.7	6440.1	7199.8	7308.5	7283.8	6995.3	6857.4
65°	2661.4	2710.9	3051.8	3776.4	4850.1	6036.2	7220.8	7532.5	7537.0	7232.8	7005.0
67.5°	1772.1	1914.4	2210.4	2833.8	3960.0	5376.1	7036.5	7569.2	7612.7	7314.5	6930.9
70°	864.7	1052.0	1342.0	1841.7	2833.8	4363.8	6554.7	7268.0	7364.7	7076.2	6488.8
72.5°	358.9	419.6	577.7	908.9	1626.7	2944.7	5586.6	6451.3	6630.4	6270.0	5455.5
75°	242.0	262.2	330.4	466.1	741.0	1452.1	4028.9	4810.4	5098.9	4735.5	3870.8
77.5°	186.6	199.3	240.5	325.9	440.6	549.2	2156.4	2899.0	3048.1	2821.8	2014.1
80°	146.9	156.6	179.8	237.5	312.5	293.7	735.0	1313.5	1399.7	1174.1	647.4
82.5°	127.4	131.1	128.9	161.1	207.6	171.6	241.3	484.8	535.0	388.1	211.3
85°	92.2	102.7	107.1	99.7	110.1	86.9	98.9	171.6	188.8	168.6	119.1
87.5°	37.5	55.4	68.2	64.4	40.5	24.7	30.7	50.2	57.7	62.9	39.0
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°	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7	1581.7
2.5°	1583.2	1588.5	1592.2	1596.7	1599.7	1604.2	1613.2	1618.4	1619.2	1622.9	1622.2
5°	1597.5	1605.0	1613.2	1625.2	1638.7	1649.9	1667.2	1679.1	1683.6	1687.4	1686.6
7.5°	1628.2	1638.7	1653.7	1674.6	1694.1	1709.1	1730.1	1744.3	1758.6	1763.8	1764.6
10°	1673.9	1688.9	1710.6	1739.1	1760.1	1779.5	1801.3	1813.3	1827.5	1833.5	1836.5
12.5°	1730.8	1746.6	1775.0	1814.8	1834.2	1847.7	1855.2	1852.2	1855.2	1860.5	1862.0
15°	1796.0	1813.3	1845.5	1888.2	1901.7	1889.7	1873.2	1858.2	1856.0	1857.5	1862.7
17.5°	1873.2	1885.9	1923.4	1959.4	1949.6	1900.2	1864.2	1840.2	1828.2	1824.5	1829.7
20°	1981.1	1981.1	2011.8	2034.3	1969.1	1885.2	1829.0	1790.0	1765.3	1754.8	1752.6
22.5°	2112.2	2100.2	2119.7	2104.0	1965.4	1843.2	1765.3	1697.9	1660.4	1645.4	1643.2
25°	2278.6	2264.3	2259.1	2161.7	1938.4	1776.5	1649.9	1568.2	1535.3	1527.0	1528.5
27.5°	2529.6	2493.6	2425.4	2193.1	1888.9	1671.6	1515.0	1439.4	1420.6	1421.4	1423.6
30°	2863.8	2791.8	2624.7	2198.4	1808.0	1523.3	1377.2	1323.2	1314.2	1318.0	1330.7
32.5°	3173.2	3105.0	2828.5	2174.4	1683.6	1377.9	1253.5	1217.6	1204.1	1208.6	1214.6
35°	3416.0	3397.2	3017.4	2140.7	1530.8	1241.6	1142.7	1111.9	1085.7	1079.7	1084.2
37.5°	3645.3	3637.8	3159.0	2093.5	1379.4	1144.9	1053.5	1013.0	974.8	953.8	954.6
40°	3897.0	3889.5	3251.9	2020.8	1245.3	1061.0	973.3	920.1	872.9	834.7	838.4
42.5°	4180.2	4136.0	3296.1	1916.7	1131.4	989.8	908.1	836.2	774.0	738.8	741.0
45°	4489.7	4390.0	3295.3	1784.0	1035.5	924.6	838.4	736.5	678.8	645.9	644.4
47.5°	4817.9	4632.8	3254.9	1637.2	942.6	852.7	730.5	652.6	614.4	594.2	589.7
50°	5156.6	4859.8	3185.9	1468.6	847.4	771.0	663.1	609.9	580.7	562.0	555.2
52.5°	5475.0	5065.9	3102.8	1277.5	750.8	691.6	633.1	591.9	561.2	540.2	531.2
55°	5771.0	5243.5	2985.1	1082.0	672.1	638.4	618.9	584.4	549.2	524.5	514.8
57.5°	6034.0	5358.9	2782.1	898.4	615.9	601.7	603.9	571.7	531.2	510.3	496.8
60°	6252.8	5443.5	2481.6	728.3	570.2	565.7	580.7	547.7	500.5	476.5	466.1
62.5°	6383.9	5442.0	2113.0	596.4	531.2	532.7	550.0	517.8	469.8	447.3	440.6
65°	6372.6	5308.7	1708.4	510.3	493.8	495.3	517.8	484.8	444.3	430.8	430.1
67.5°	6147.1	4983.5	1310.5	454.1	452.6	459.3	485.5	462.3	428.6	427.1	429.3
70°	5536.4	4308.4	944.1	409.1	409.9	419.6	454.1	448.1	420.3	423.3	422.6
72.5°	4439.5	3284.9	633.9	361.9	362.7	378.4	424.1	436.8	412.1	451.8	457.8
75°	2956.7	2048.5	407.6	311.7	312.5	332.7	397.9	415.1	389.6	450.3	454.1
77.5°	1420.6	920.9	295.2	262.2	262.2	281.0	343.9	371.6	331.9	349.9	320.7
80°	490.8	346.2	232.3	211.3	206.8	219.5	290.0	322.2	286.2	263.7	247.3
82.5°	193.3	179.8	186.6	164.1	149.1	157.3	225.5	266.0	210.5	190.3	189.6
85°	110.9	116.9	131.9	108.6	86.2	96.7	165.6	191.1	158.8	140.1	143.1
87.5°	30.0	41.2	60.7	56.2	39.0	41.2	78.7	105.6	91.4	70.4	72.7
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)