

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: P882929

Luminaire Tested: **NAV-SB3A-740-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882929
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-SB3A-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14516 lumens
Efficiency: N/A
Efficacy: 171.4 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

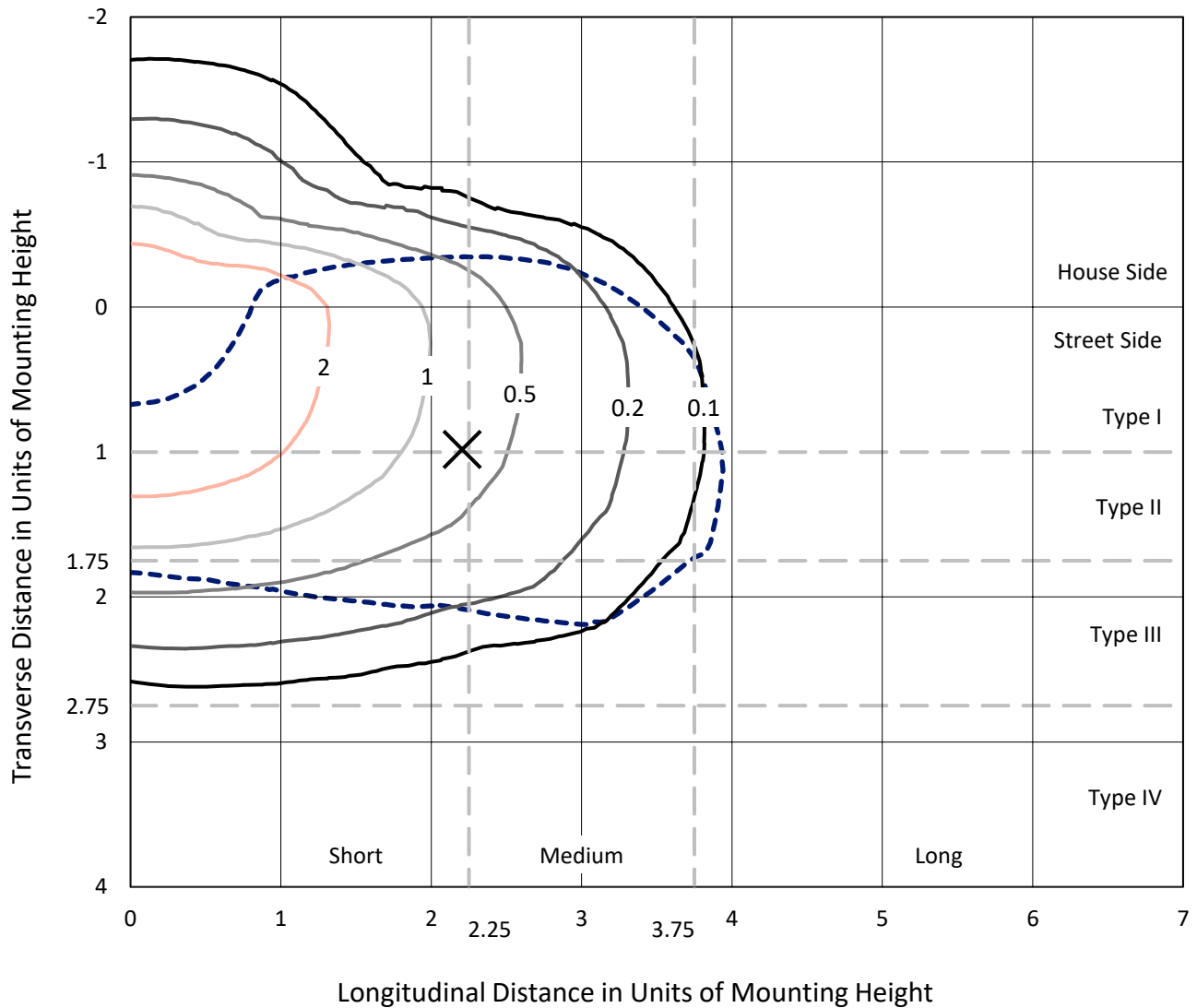
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

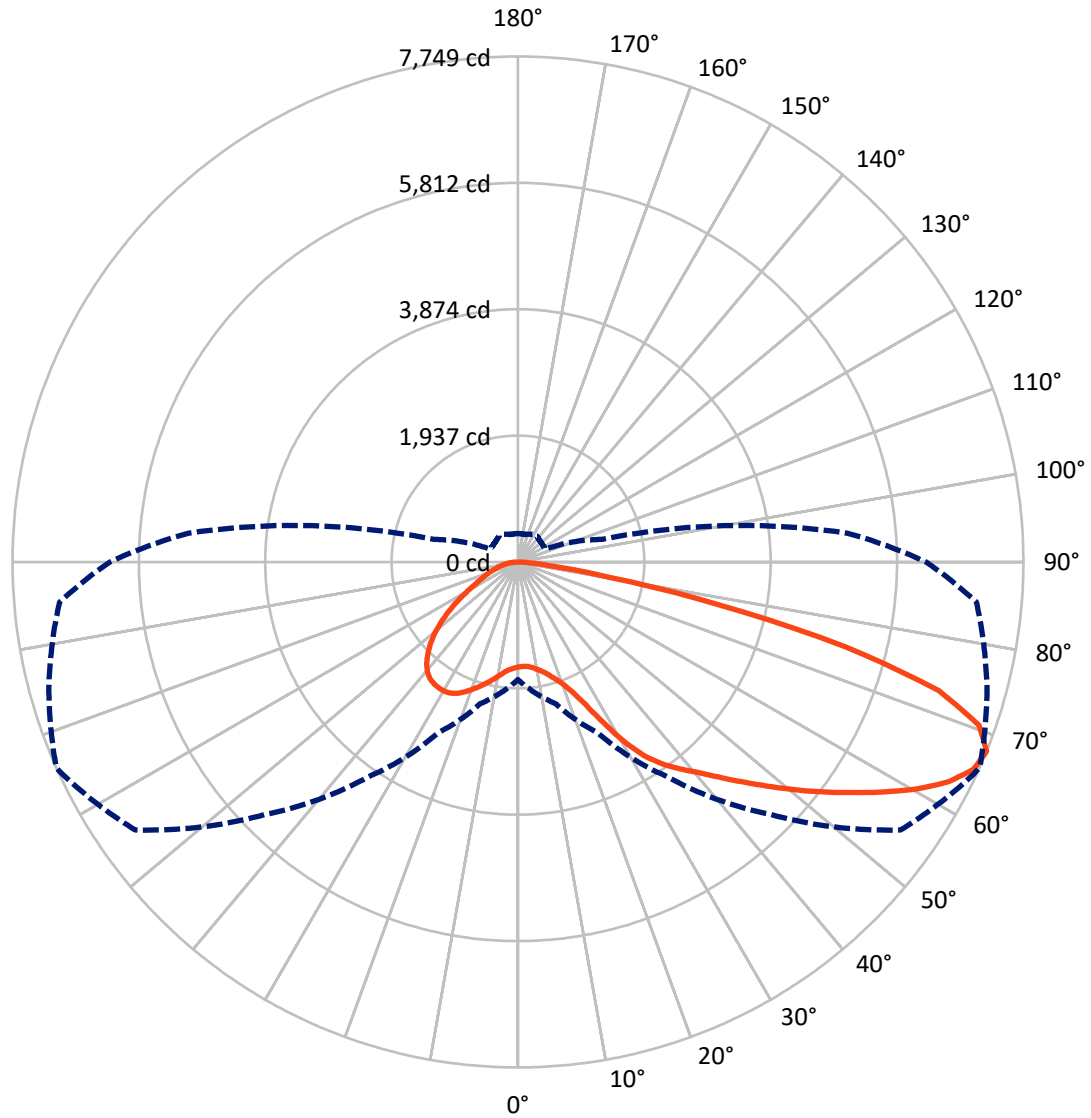
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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	3609.4	0.0	3609.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	10906.6	0.0	10906.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	14516.0	0.0	14516.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.6	1.1
10°-20°	527.4	3.6
20°-30°	1016.5	7.0
30°-40°	1782.3	12.3
40°-50°	2649.7	18.3
50°-60°	3358.8	23.1
60°-70°	3286.5	22.6
70°-80°	1567.7	10.8
80°-90°	167.6	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°	14516.0	100.0
0°-180°	14516.0	100.0

Coefficient of Utilization



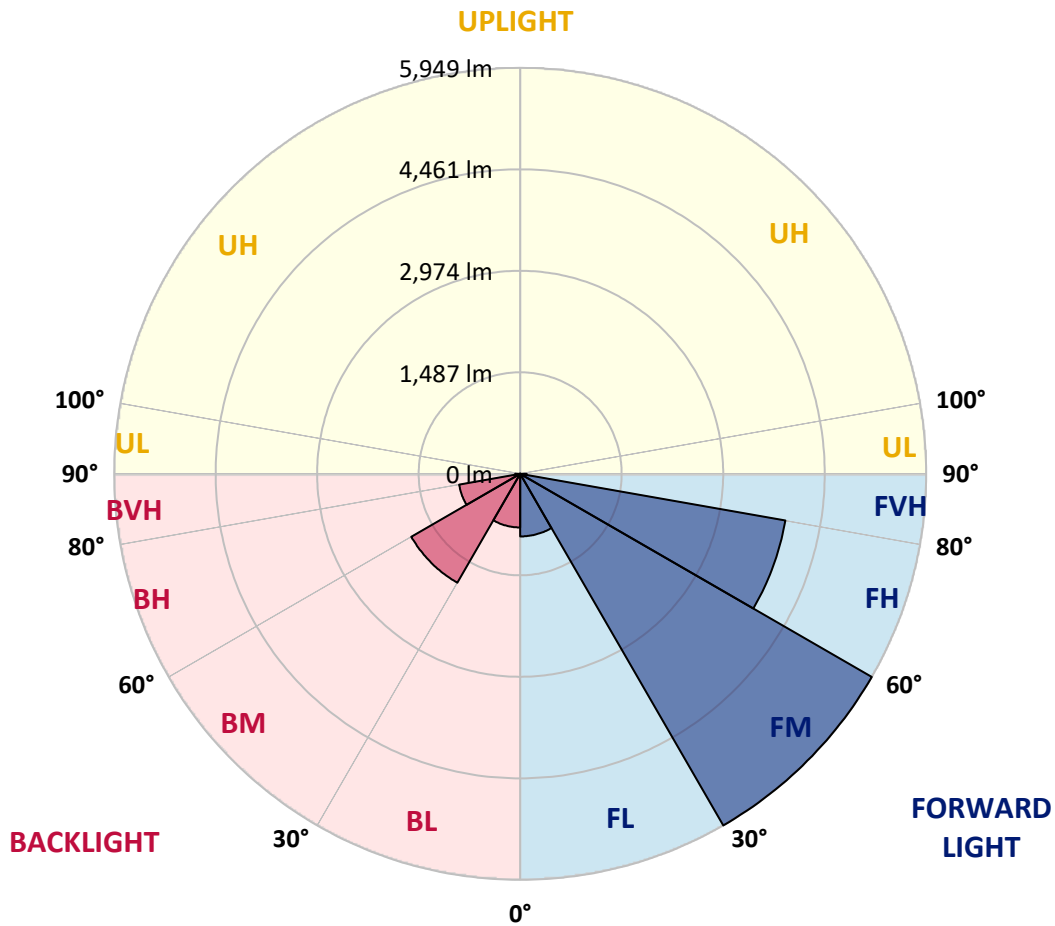
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	917.3	6.3			
FM (30°-60°)	5948.5	41.0			
FH (60°-80°)	3945.8	27.2			G2/5000
FVH (80°-90°)	95.0	0.7			G1/100
BL (0°-30°)	786.2	5.4	B2/1000		
BM (30°-60°)	1842.3	12.7	B2/2500		
BH (60°-80°)	908.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	72.6	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0
2.5°	1593.2	1602.4	1600.1	1596.3	1595.5	1597.1	1599.3	1601.6	1600.9	1604.7	1610.8
5°	1588.7	1597.8	1597.1	1597.1	1600.1	1606.2	1610.0	1613.8	1610.0	1614.6	1623.0
7.5°	1591.7	1598.6	1601.6	1604.7	1612.3	1623.7	1632.9	1641.3	1636.7	1642.0	1652.7
10°	1630.6	1635.9	1639.0	1639.0	1644.3	1657.3	1666.5	1681.7	1677.9	1686.3	1700.0
12.5°	1701.5	1706.9	1706.9	1703.8	1707.6	1716.0	1719.1	1735.9	1729.0	1742.7	1756.5
15°	1788.5	1799.2	1790.8	1785.4	1787.0	1795.3	1794.6	1807.6	1800.7	1812.1	1824.3
17.5°	1884.6	1898.3	1884.6	1883.8	1880.8	1889.9	1890.7	1902.1	1889.9	1898.3	1906.7
20°	1998.2	2017.3	2005.8	2009.7	2002.8	2006.6	2010.4	2027.2	2008.1	2014.2	2011.9
22.5°	2158.4	2181.3	2169.1	2183.6	2179.0	2175.9	2175.2	2204.9	2175.2	2177.4	2155.3
25°	2391.8	2419.2	2397.9	2417.7	2417.7	2427.6	2439.0	2477.2	2427.6	2413.1	2355.9
27.5°	2736.5	2764.0	2722.0	2734.2	2730.4	2754.8	2742.6	2837.2	2783.8	2760.1	2645.0
30°	3151.4	3200.2	3120.9	3117.8	3114.0	3152.9	3170.5	3233.0	3178.8	3155.2	3016.4
32.5°	3599.8	3650.9	3556.4	3528.9	3514.4	3538.1	3523.6	3573.9	3536.5	3499.9	3328.3
35°	4074.2	4124.6	4034.6	3981.2	3923.2	3873.6	3821.8	3834.8	3799.7	3744.0	3566.3
37.5°	4522.7	4615.0	4519.6	4462.4	4355.7	4258.8	4113.9	4053.6	4020.8	3969.7	3790.5
40°	4979.5	5032.2	4959.7	4910.9	4795.0	4643.2	4411.3	4284.0	4239.7	4190.2	4038.4
42.5°	5315.9	5366.2	5327.3	5293.8	5203.0	5026.8	4727.1	4567.7	4503.6	4447.9	4319.1
45°	5582.8	5620.2	5595.8	5608.0	5569.1	5398.2	5054.3	4872.0	4805.6	4737.8	4636.3
47.5°	5690.4	5730.0	5768.9	5841.4	5907.7	5781.9	5405.9	5201.5	5131.3	5061.9	4962.0
50°	5678.1	5718.6	5831.4	5985.5	6191.4	6149.5	5776.5	5552.3	5487.5	5408.2	5315.9
52.5°	5580.5	5626.3	5771.2	6027.5	6355.4	6424.8	6154.1	5914.6	5853.6	5759.0	5666.7
55°	5324.3	5351.7	5569.1	5932.1	6394.3	6617.0	6524.0	6300.5	6239.5	6107.5	6006.9
57.5°	4849.1	4888.8	5205.3	5675.1	6296.7	6747.4	6848.9	6706.2	6647.5	6457.6	6352.4
60°	4229.1	4292.4	4654.6	5243.4	6048.0	6746.7	7144.0	7105.1	7056.3	6802.3	6692.5
62.5°	3527.4	3600.6	3949.2	4633.3	5613.3	6555.2	7328.6	7439.2	7414.0	7120.4	6980.0
65°	2709.0	2759.4	3106.4	3843.9	4936.8	6144.1	7349.9	7667.2	7671.8	7362.1	7130.3
67.5°	1803.7	1948.6	2249.9	2884.5	4030.8	5472.2	7162.3	7704.6	7748.8	7445.3	7054.8
70°	880.1	1070.8	1366.0	1874.7	2884.5	4441.8	6671.9	7398.0	7496.4	7202.7	6604.8
72.5°	365.3	427.1	588.0	925.1	1655.8	2997.3	5686.5	6566.7	6749.0	6382.1	5553.1
75°	246.3	266.9	336.3	474.4	754.3	1478.1	4100.9	4896.4	5190.0	4820.1	3940.0
77.5°	189.9	202.9	244.8	331.8	448.5	559.0	2195.0	2950.8	3102.6	2872.3	2050.1
80°	149.5	159.4	183.0	241.8	318.0	299.0	748.2	1337.0	1424.7	1195.1	659.0
82.5°	129.7	133.5	131.2	164.0	211.3	174.7	245.6	493.5	544.6	395.1	215.1
85°	93.8	104.5	109.1	101.4	112.1	88.5	100.7	174.7	192.2	171.6	121.3
87.5°	38.1	56.4	69.4	65.6	41.2	25.2	31.3	51.1	58.7	64.1	39.7
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°	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0	1610.0
2.5°	1611.5	1616.9	1620.7	1625.3	1628.3	1632.9	1642.0	1647.4	1648.2	1652.0	1651.2
5°	1626.0	1633.7	1642.0	1654.3	1668.0	1679.4	1697.0	1709.2	1713.7	1717.6	1716.8
7.5°	1657.3	1668.0	1683.2	1704.6	1724.4	1739.7	1761.0	1775.5	1790.0	1795.3	1796.1
10°	1703.8	1719.1	1741.2	1770.2	1791.5	1811.4	1833.5	1845.7	1860.2	1866.3	1869.3
12.5°	1761.8	1777.8	1806.8	1847.2	1867.0	1880.8	1888.4	1885.3	1888.4	1893.7	1895.3
15°	1828.1	1845.7	1878.5	1922.0	1935.7	1923.5	1906.7	1891.4	1889.2	1890.7	1896.0
17.5°	1906.7	1919.7	1957.8	1994.4	1984.5	1934.2	1897.5	1873.1	1860.9	1857.1	1862.5
20°	2016.5	2016.5	2047.8	2070.7	2004.3	1918.9	1861.7	1822.0	1796.9	1786.2	1783.9
22.5°	2150.0	2137.8	2157.6	2141.6	2000.5	1876.2	1796.9	1728.2	1690.1	1674.8	1672.6
25°	2319.3	2304.8	2299.5	2200.3	1973.1	1808.3	1679.4	1596.3	1562.7	1554.3	1555.9
27.5°	2574.8	2538.2	2468.8	2232.4	1922.7	1701.5	1542.1	1465.1	1446.0	1446.8	1449.1
30°	2915.0	2841.7	2671.7	2237.7	1840.3	1550.5	1401.8	1346.9	1337.7	1341.6	1354.5
32.5°	3229.9	3160.5	2879.1	2213.3	1713.7	1402.6	1276.0	1239.4	1225.6	1230.2	1236.3
35°	3477.1	3458.0	3071.3	2179.0	1558.2	1263.8	1163.1	1131.8	1105.1	1099.0	1103.6
37.5°	3710.4	3702.8	3215.5	2130.9	1404.1	1165.4	1072.3	1031.1	992.2	970.9	971.7
40°	3966.7	3959.1	3310.0	2056.9	1267.6	1080.0	990.7	936.6	888.5	849.6	853.4
42.5°	4255.0	4210.0	3355.0	1950.9	1151.6	1007.5	924.4	851.2	787.8	752.0	754.3
45°	4570.0	4468.5	3354.3	1815.9	1054.0	941.1	853.4	749.7	691.0	657.4	655.9
47.5°	4904.0	4715.6	3313.1	1666.5	959.5	867.9	743.6	664.3	625.4	604.8	600.2
50°	5248.8	4946.7	3242.9	1494.9	862.6	784.8	675.0	620.8	591.1	572.0	565.1
52.5°	5572.9	5156.5	3158.3	1300.4	764.2	704.0	644.5	602.5	571.2	549.9	540.7
55°	5874.2	5337.2	3038.5	1101.3	684.1	649.8	630.0	594.9	559.0	533.9	524.0
57.5°	6141.9	5454.7	2831.8	914.5	626.9	612.4	614.7	581.9	540.7	519.4	505.7
60°	6364.6	5540.9	2526.0	741.3	580.4	575.8	591.1	557.5	509.5	485.1	474.4
62.5°	6498.0	5539.3	2150.8	607.1	540.7	542.3	559.8	527.0	478.2	455.3	448.5
65°	6486.6	5403.6	1738.9	519.4	502.6	504.1	527.0	493.5	452.3	438.5	437.8
67.5°	6257.0	5072.6	1333.9	462.2	460.7	467.5	494.2	470.6	436.3	434.7	437.0
70°	5635.4	4385.4	961.0	416.4	417.2	427.1	462.2	456.1	427.9	430.9	430.2
72.5°	4518.9	3343.6	645.2	368.4	369.1	385.2	431.7	444.6	419.5	459.9	466.0
75°	3009.5	2085.2	414.9	317.3	318.0	338.6	405.0	422.5	396.6	458.4	462.2
77.5°	1446.0	937.3	300.5	266.9	266.9	286.0	350.1	378.3	337.9	356.2	326.4
80°	499.6	352.4	236.4	215.1	210.5	223.5	295.2	328.0	291.3	268.5	251.7
82.5°	196.8	183.0	189.9	167.0	151.8	160.2	229.6	270.8	214.3	193.7	193.0
85°	112.9	119.0	134.2	110.6	87.7	98.4	168.6	194.5	161.7	142.6	145.7
87.5°	30.5	41.9	61.8	57.2	39.7	41.9	80.1	107.5	93.0	71.7	74.0
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)