

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: P882419

Luminaire Tested: **NAV-SB2B-740-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882419
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-SB2B-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12381 lumens
Efficiency: N/A
Efficacy: 167.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

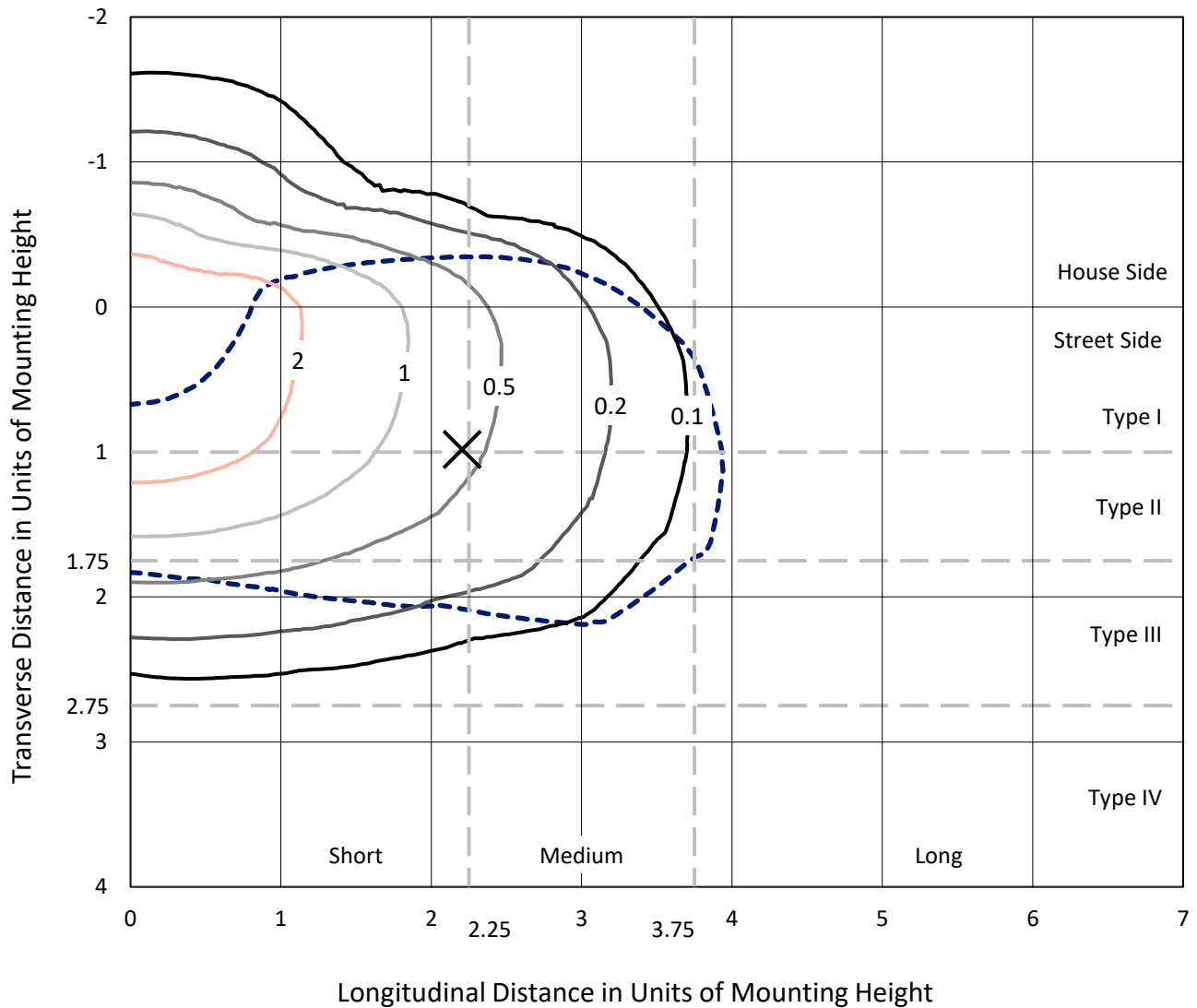
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882419
 CATALOG NUMBER: NAV-SB2B-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

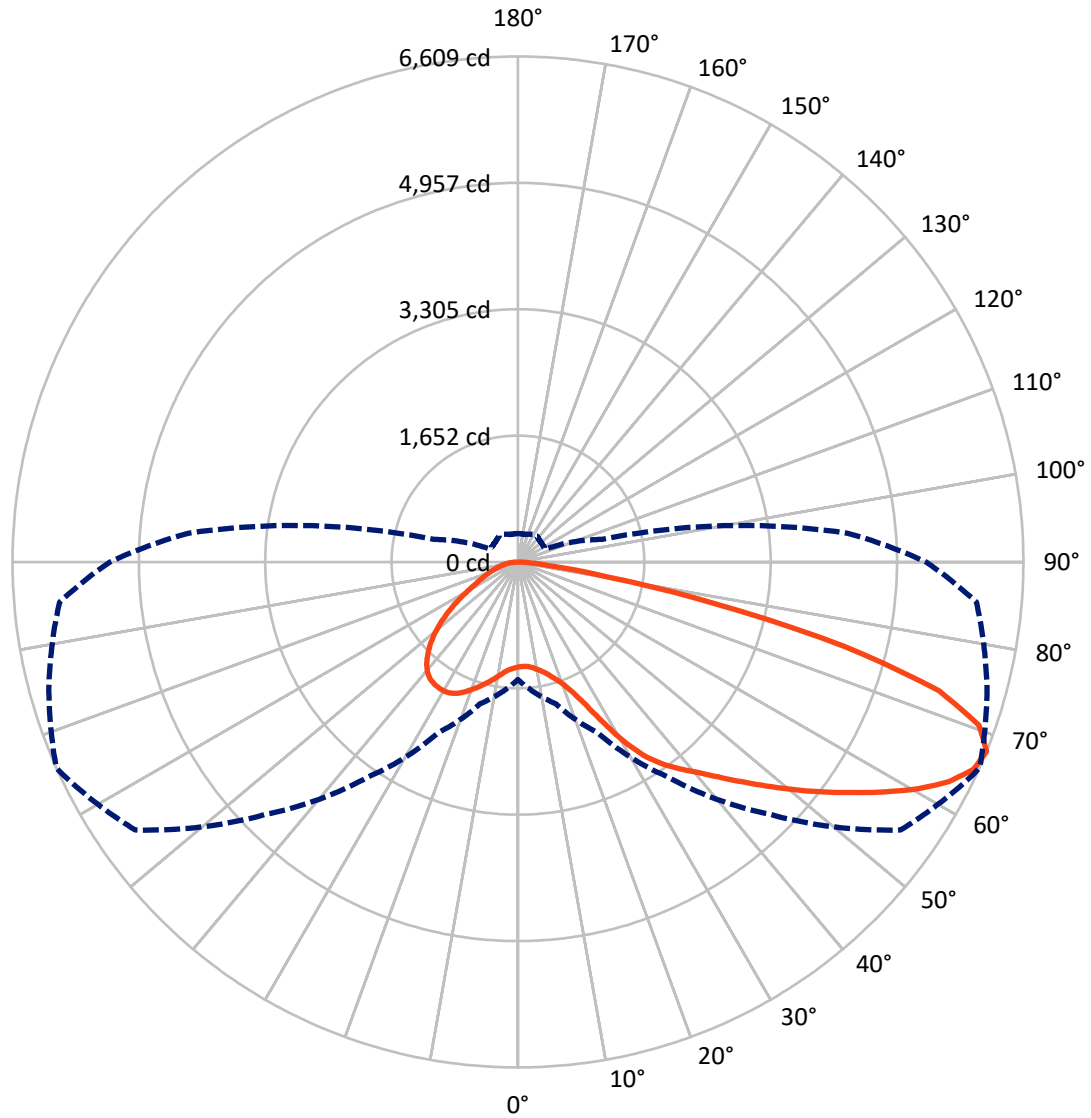
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type III - Short - N/A

REPORT NUMBER: P882419
CATALOG NUMBER: NAV-SB2B-740-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P882419
 CATALOG NUMBER: NAV-SB2B-740-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3078.5	0.0	3078.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	9302.5	0.0	9302.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	12381.0	0.0	12381.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.1	1.1
10°-20°	449.8	3.6
20°-30°	867.0	7.0
30°-40°	1520.2	12.3
40°-50°	2260.0	18.3
50°-60°	2864.8	23.1
60°-70°	2803.1	22.6
70°-80°	1337.1	10.8
80°-90°	142.9	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°	12381.0	100.0
0°-180°	12381.0	100.0

Coefficient of Utilization



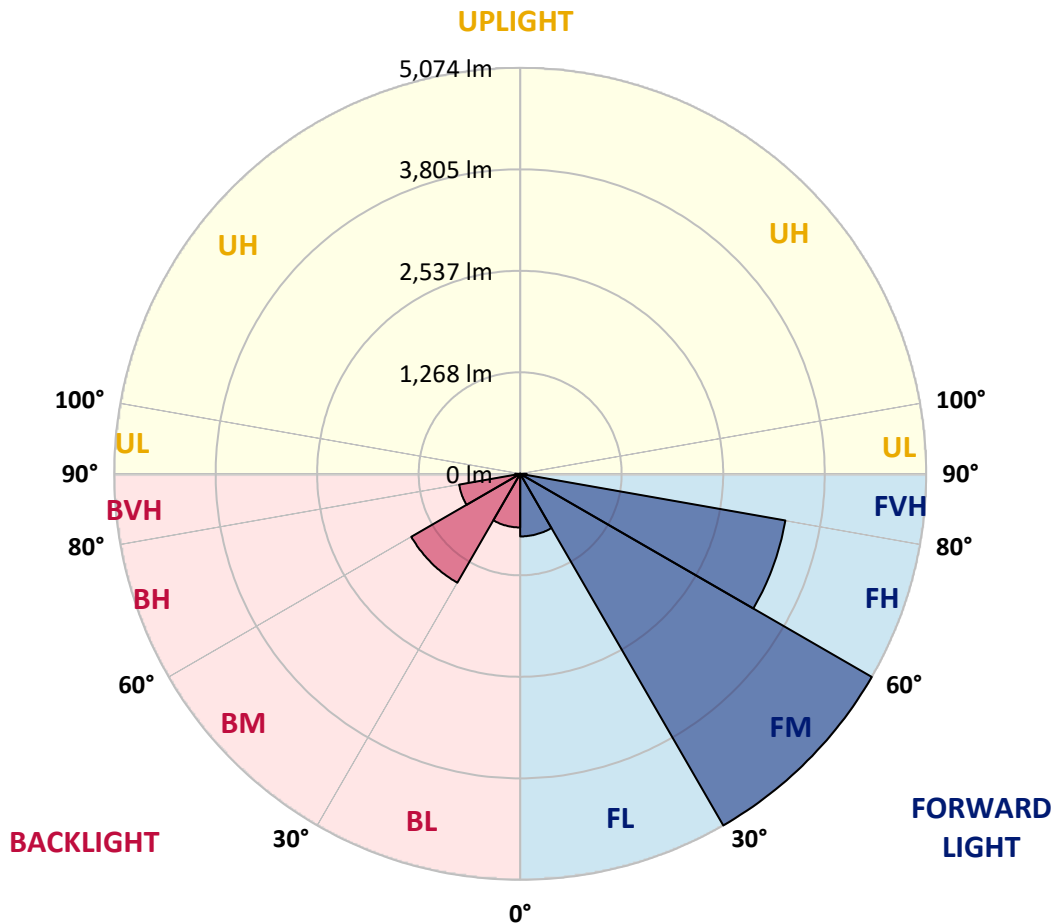
REPORT NUMBER: P882419
 CATALOG NUMBER: NAV-SB2B-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	782.4	6.3			
FM (30°-60°)	5073.6	41.0			
FH (60°-80°)	3365.5	27.2			G2/5000
FVH (80°-90°)	81.0	0.7			G1/100
BL (0°-30°)	670.6	5.4	B2/1000		
BM (30°-60°)	1571.3	12.7	B2/2500		
BH (60°-80°)	774.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	61.9	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



REPORT NUMBER: P882419
 CATALOG NUMBER: NAV-SB2B-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2
2.5°	1358.9	1366.7	1364.8	1361.5	1360.9	1362.2	1364.1	1366.1	1365.4	1368.7	1373.9
5°	1355.0	1362.8	1362.2	1362.2	1364.8	1370.0	1373.2	1376.5	1373.2	1377.1	1384.3
7.5°	1357.6	1363.5	1366.1	1368.7	1375.2	1384.9	1392.7	1399.9	1396.0	1400.5	1409.6
10°	1390.8	1395.3	1397.9	1397.9	1402.5	1413.5	1421.4	1434.4	1431.1	1438.3	1450.0
12.5°	1451.3	1455.8	1455.8	1453.2	1456.5	1463.6	1466.2	1480.5	1474.7	1486.4	1498.1
15°	1525.4	1534.5	1527.4	1522.8	1524.1	1531.3	1530.6	1541.7	1535.8	1545.6	1556.0
17.5°	1607.4	1619.1	1607.4	1606.7	1604.1	1612.0	1612.6	1622.4	1612.0	1619.1	1626.3
20°	1704.3	1720.6	1710.8	1714.1	1708.2	1711.5	1714.7	1729.0	1712.8	1718.0	1716.0
22.5°	1840.9	1860.4	1850.0	1862.4	1858.5	1855.9	1855.2	1880.6	1855.2	1857.2	1838.3
25°	2040.0	2063.4	2045.2	2062.1	2062.1	2070.6	2080.3	2112.8	2070.6	2058.2	2009.4
27.5°	2334.0	2357.4	2321.7	2332.1	2328.8	2349.6	2339.2	2419.9	2374.3	2354.2	2256.0
30°	2687.9	2729.5	2661.9	2659.3	2656.0	2689.2	2704.2	2757.5	2711.3	2691.1	2572.7
32.5°	3070.4	3114.0	3033.3	3009.9	2997.5	3017.7	3005.3	3048.3	3016.4	2985.2	2838.8
35°	3475.0	3517.9	3441.2	3395.6	3346.2	3303.9	3259.7	3270.7	3240.8	3193.3	3041.8
37.5°	3857.5	3936.2	3854.9	3806.1	3715.0	3632.4	3508.8	3457.4	3429.5	3385.9	3233.0
40°	4247.1	4292.0	4230.2	4188.6	4089.7	3960.3	3762.5	3653.9	3616.2	3573.9	3444.4
42.5°	4534.0	4577.0	4543.8	4515.2	4437.7	4287.5	4031.8	3895.9	3841.2	3793.7	3683.8
45°	4761.7	4793.6	4772.8	4783.2	4750.0	4604.3	4310.9	4155.4	4098.8	4040.9	3954.4
47.5°	4853.4	4887.2	4920.4	4982.2	5038.8	4931.5	4610.8	4436.4	4376.6	4317.4	4232.2
50°	4843.0	4877.5	4973.8	5105.2	5280.8	5245.0	4926.9	4735.7	4680.4	4612.7	4534.0
52.5°	4759.7	4798.8	4922.4	5140.9	5420.7	5479.9	5248.9	5044.7	4992.6	4912.0	4833.3
55°	4541.2	4564.6	4750.0	5059.6	5453.8	5643.8	5564.4	5373.8	5321.8	5209.2	5123.4
57.5°	4135.9	4169.7	4439.7	4840.4	5370.6	5755.0	5841.5	5719.9	5669.8	5507.8	5418.1
60°	3607.1	3661.0	3970.0	4472.2	5158.5	5754.4	6093.3	6060.1	6018.5	5801.9	5708.2
62.5°	3008.6	3071.0	3368.3	3951.8	4787.7	5591.1	6250.7	6345.0	6323.6	6073.1	5953.4
65°	2310.6	2353.5	2649.5	3278.5	4210.7	5240.5	6268.9	6539.5	6543.4	6279.3	6081.6
67.5°	1538.4	1662.0	1919.0	2460.2	3437.9	4667.4	6108.9	6571.4	6609.1	6350.2	6017.2
70°	750.7	913.3	1165.1	1598.9	2460.2	3788.5	5690.6	6309.9	6393.8	6143.4	5633.4
72.5°	311.6	364.3	501.5	789.1	1412.2	2556.5	4850.2	5600.8	5756.3	5443.4	4736.3
75°	210.1	227.7	286.9	404.6	643.3	1260.7	3497.8	4176.2	4426.7	4111.2	3360.5
77.5°	162.0	173.0	208.8	283.0	382.5	476.8	1872.2	2516.8	2646.3	2449.8	1748.6
80°	127.5	136.0	156.1	206.2	271.3	255.0	638.1	1140.3	1215.1	1019.3	562.0
82.5°	110.6	113.8	111.9	139.9	180.2	149.0	209.5	420.9	464.5	337.0	183.4
85°	80.0	89.1	93.0	86.5	95.6	75.5	85.9	149.0	163.9	146.4	103.4
87.5°	32.5	48.1	59.2	55.9	35.1	21.5	26.7	43.6	50.1	54.6	33.8
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: P882419
 CATALOG NUMBER: NAV-SB2B-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2	1373.2
2.5°	1374.5	1379.1	1382.3	1386.2	1388.8	1392.7	1400.5	1405.1	1405.7	1409.0	1408.3
5°	1386.9	1393.4	1400.5	1410.9	1422.7	1432.4	1447.4	1457.8	1461.7	1464.9	1464.3
7.5°	1413.5	1422.7	1435.7	1453.9	1470.8	1483.8	1502.0	1514.4	1526.7	1531.3	1531.9
10°	1453.2	1466.2	1485.1	1509.8	1528.0	1544.9	1563.8	1574.2	1586.6	1591.8	1594.4
12.5°	1502.7	1516.3	1541.0	1575.5	1592.4	1604.1	1610.7	1608.0	1610.7	1615.2	1616.5
15°	1559.3	1574.2	1602.2	1639.3	1651.0	1640.6	1626.3	1613.3	1611.3	1612.6	1617.2
17.5°	1626.3	1637.3	1669.8	1701.1	1692.6	1649.7	1618.5	1597.6	1587.2	1584.0	1588.5
20°	1719.9	1719.9	1746.6	1766.1	1709.5	1636.7	1587.9	1554.1	1532.6	1523.5	1521.5
22.5°	1833.8	1823.4	1840.3	1826.6	1706.3	1600.2	1532.6	1474.0	1441.5	1428.5	1426.6
25°	1978.2	1965.8	1961.3	1876.7	1682.9	1542.3	1432.4	1361.5	1332.9	1325.7	1327.0
27.5°	2196.1	2164.9	2105.7	1904.0	1639.9	1451.3	1315.3	1249.6	1233.4	1234.0	1236.0
30°	2486.2	2423.8	2278.7	1908.6	1569.7	1322.5	1195.6	1148.8	1141.0	1144.2	1155.3
32.5°	2754.9	2695.7	2455.7	1887.8	1461.7	1196.3	1088.3	1057.1	1045.4	1049.3	1054.5
35°	2965.7	2949.4	2619.6	1858.5	1329.0	1077.9	992.0	965.3	942.6	937.4	941.3
37.5°	3164.7	3158.2	2742.5	1817.5	1197.6	994.0	914.6	879.5	846.3	828.1	828.7
40°	3383.3	3376.8	2823.2	1754.4	1081.1	921.1	845.0	798.8	757.8	724.7	727.9
42.5°	3629.2	3590.8	2861.6	1664.0	982.3	859.3	788.4	726.0	672.0	641.4	643.3
45°	3897.8	3811.3	2860.9	1548.9	899.0	802.7	727.9	639.4	589.4	560.7	559.4
47.5°	4182.7	4022.1	2825.8	1421.4	818.3	740.3	634.2	566.6	533.4	515.9	511.9
50°	4476.8	4219.2	2765.9	1275.0	735.7	669.4	575.7	529.5	504.1	487.9	482.0
52.5°	4753.2	4398.1	2693.7	1109.1	651.8	600.4	549.7	513.9	487.2	469.0	461.2
55°	5010.2	4552.2	2591.6	939.3	583.5	554.2	537.3	507.4	476.8	455.4	446.9
57.5°	5238.5	4652.4	2415.3	780.0	534.7	522.4	524.3	496.3	461.2	443.0	431.3
60°	5428.5	4725.9	2154.5	632.3	495.0	491.1	504.1	475.5	434.5	413.7	404.6
62.5°	5542.3	4724.6	1834.4	517.8	461.2	462.5	477.5	449.5	407.9	388.4	382.5
65°	5532.5	4608.8	1483.2	443.0	428.7	430.0	449.5	420.9	385.7	374.0	373.4
67.5°	5336.7	4326.5	1137.7	394.2	392.9	398.8	421.5	401.4	372.1	370.8	372.7
70°	4806.6	3740.4	819.6	355.2	355.8	364.3	394.2	389.0	364.9	367.5	366.9
72.5°	3854.2	2851.8	550.3	314.2	314.8	328.5	368.2	379.2	357.8	392.3	397.5
75°	2566.9	1778.5	353.9	270.6	271.3	288.8	345.4	360.4	338.3	391.0	394.2
77.5°	1233.4	799.5	256.3	227.7	227.7	243.9	298.6	322.7	288.2	303.8	278.4
80°	426.1	300.5	201.7	183.4	179.5	190.6	251.7	279.7	248.5	229.0	214.7
82.5°	167.8	156.1	162.0	142.5	129.5	136.6	195.8	230.9	182.8	165.2	164.6
85°	96.3	101.5	114.5	94.3	74.8	83.9	143.8	165.9	137.9	121.6	124.2
87.5°	26.0	35.8	52.7	48.8	33.8	35.8	68.3	91.7	79.4	61.1	63.1
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)