

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: P962895

Luminaire Tested: **NAV-SB2D-722-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962895  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2D-722-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17551.1 lumens  
Efficiency: N/A  
Efficacy: 118.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

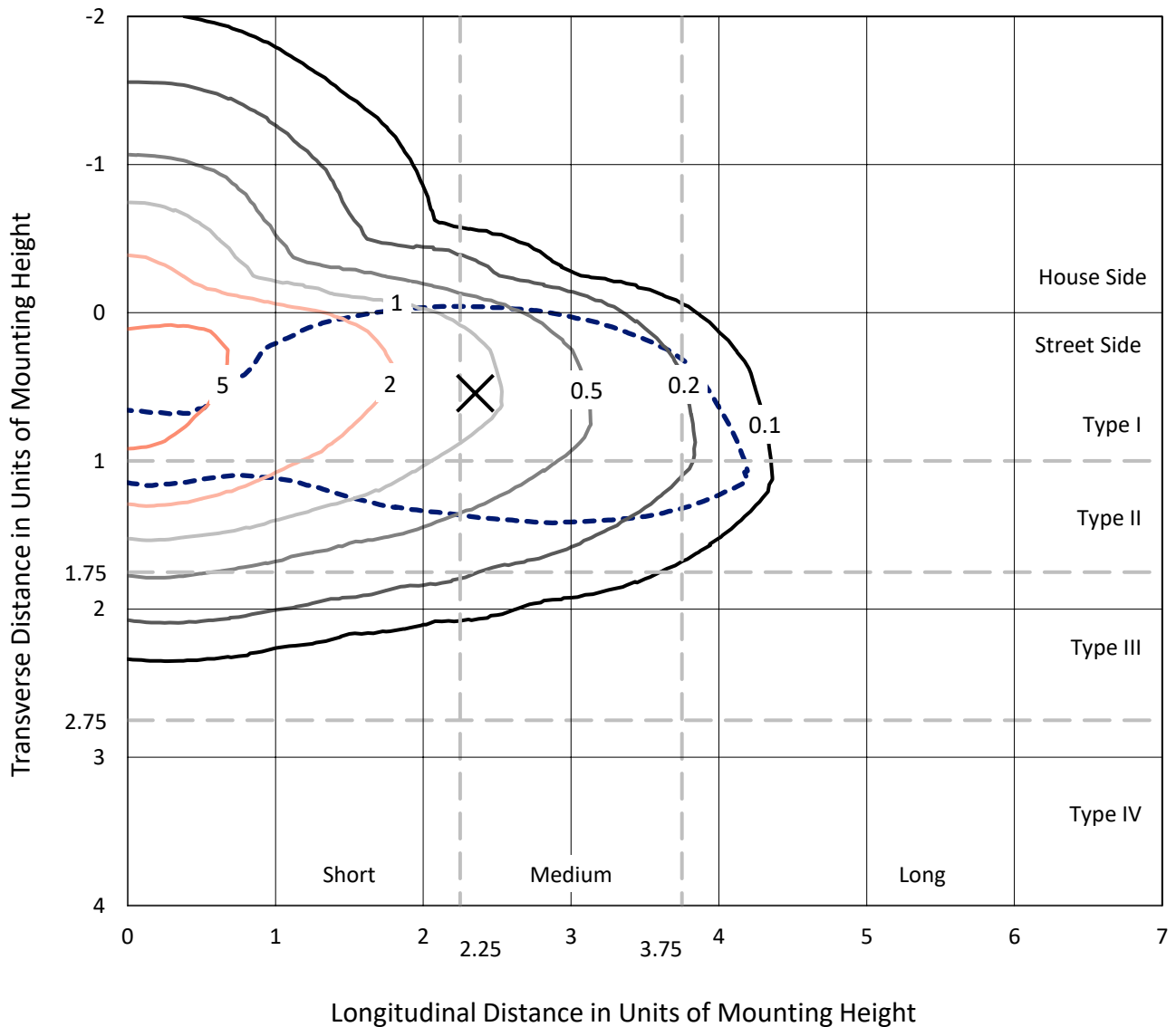
Input Watts (W): 147.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

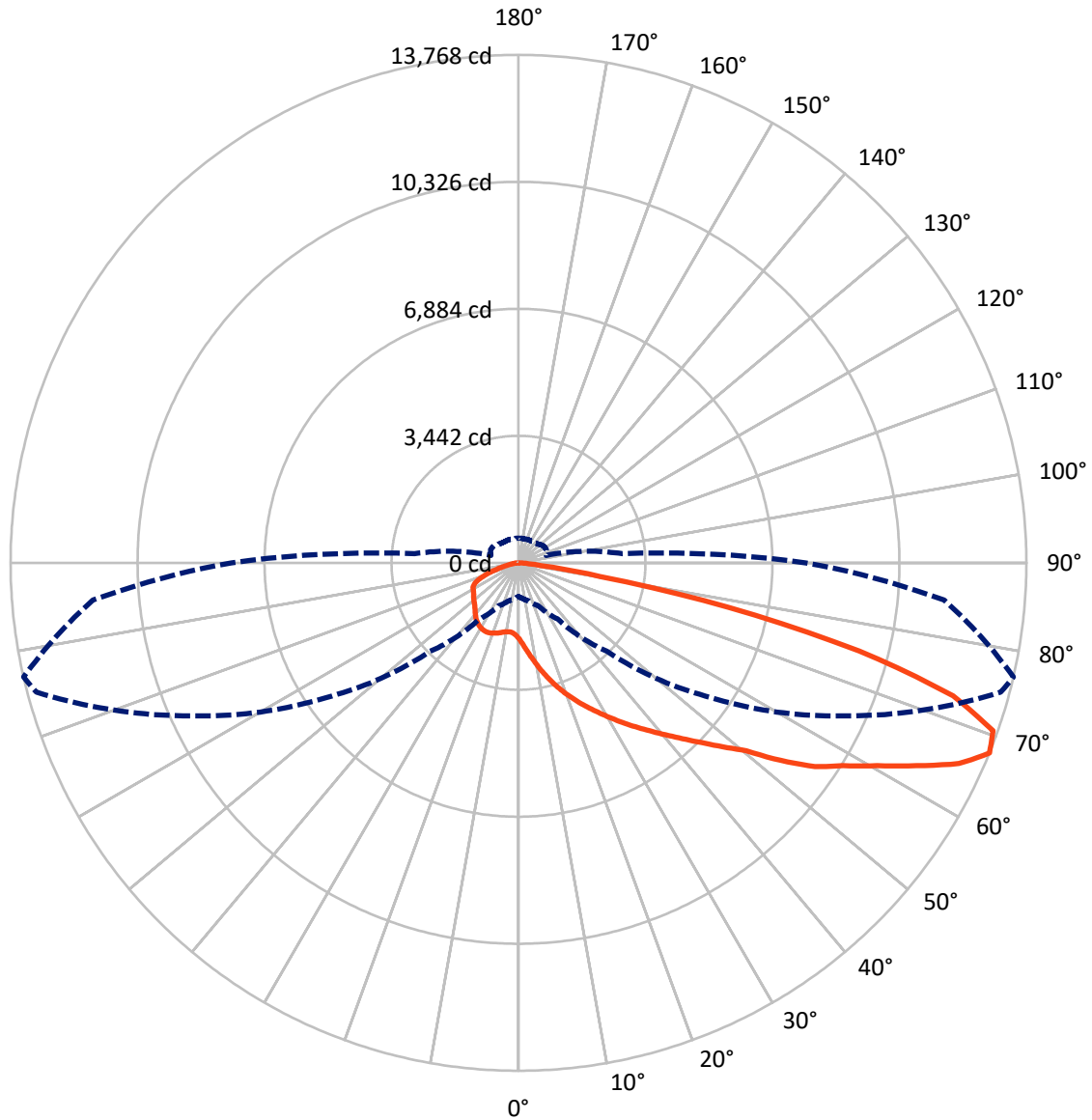
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3320.0	0.0	3320.0
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	14231.1	0.0	14231.1
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	17551.1	0.0	17551.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.7	1.3
10°-20°	793.0	4.5
20°-30°	1497.2	8.5
30°-40°	2412.0	13.7
40°-50°	3299.2	18.8
50°-60°	3721.5	21.2
60°-70°	3473.6	19.8
70°-80°	1904.1	10.8
80°-90°	229.7	1.3
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°	17551.1	100.0
0°-180°	17551.1	100.0

**Coefficient of Utilization**

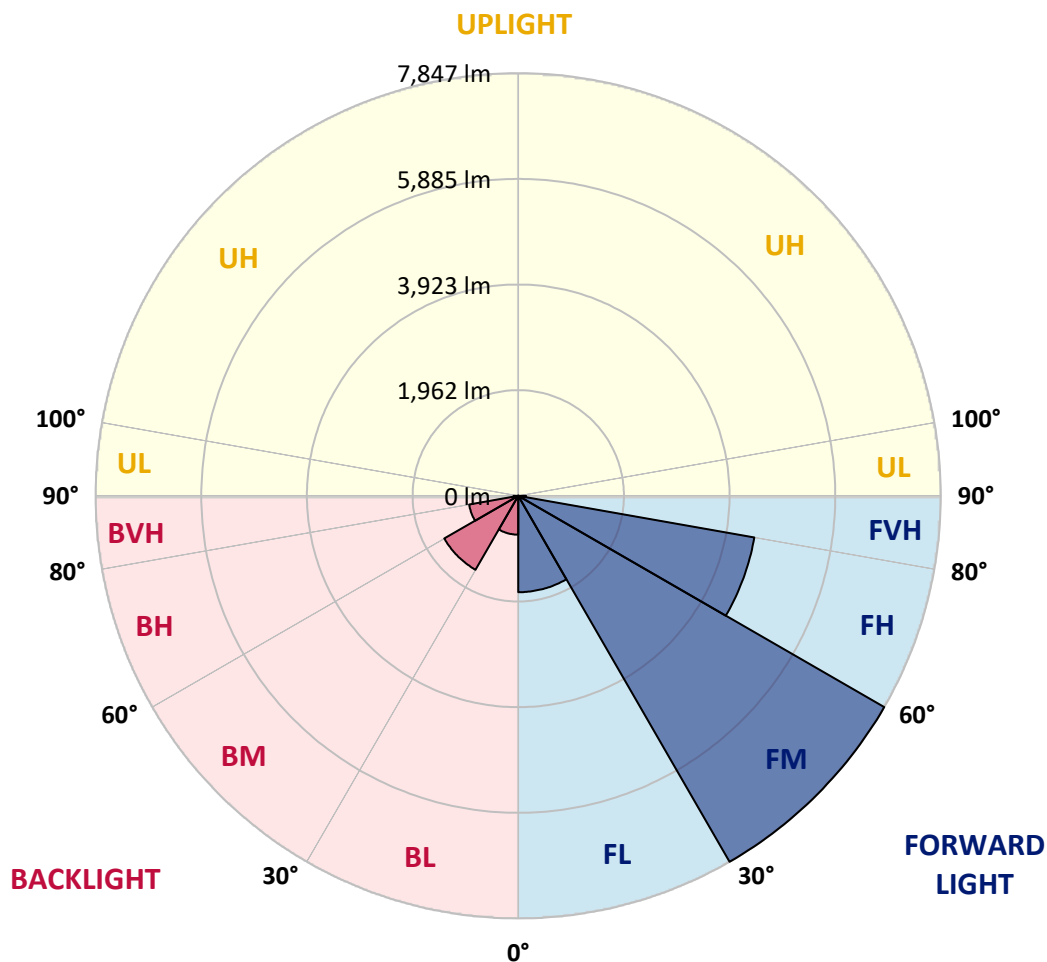


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1789.1	10.2			
FM (30°-60°)	7846.9	44.7			
FH (60°-80°)	4451.5	25.4			G2/5000
FVH (80°-90°)	143.6	0.8			G2/225
BL (0°-30°)	721.8	4.1	B2/1000		
BM (30°-60°)	1585.9	9.0	B2/2500		
BH (60°-80°)	926.2	5.3	B2/1000		G2/1000
BVH (80°-90°)	86.0	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°	77°	85°
0°	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3
2.5°	2578.4	2596.5	2573.9	2573.9	2497.8	2458.0	2381.8	2323.9	2219.6	2201.5	2132.7
5°	3047.7	3070.4	3038.6	3025.1	2935.4	2852.9	2725.2	2599.3	2413.6	2394.5	2232.3
7.5°	3411.0	3440.0	3411.9	3397.5	3317.7	3225.3	3075.8	2900.0	2638.2	2601.0	2366.4
10°	3707.2	3711.8	3702.7	3708.1	3645.6	3569.6	3416.4	3211.7	2884.7	2833.9	2528.6
12.5°	3874.9	3895.7	3913.9	3946.5	3935.6	3888.4	3750.8	3506.1	3145.5	3080.3	2705.3
15°	3953.7	3989.9	4030.7	4105.8	4166.6	4178.4	4073.2	3822.3	3411.0	3332.2	2883.7
17.5°	3981.8	4016.2	4080.5	4189.3	4319.7	4407.6	4360.5	4129.4	3673.7	3583.1	3071.3
20°	4124.0	4133.9	4173.0	4276.2	4417.5	4563.4	4598.8	4424.8	3933.7	3831.3	3265.1
22.5°	4428.4	4408.5	4419.4	4466.4	4567.9	4709.3	4789.9	4685.7	4201.1	4083.2	3460.8
25°	4931.3	4873.3	4815.2	4760.9	4812.6	4892.3	4983.8	4946.6	4481.0	4331.4	3658.3
27.5°	5566.4	5495.6	5367.9	5189.5	5126.9	5155.0	5195.8	5188.5	4740.1	4588.8	3862.2
30°	6191.4	6109.0	5956.8	5698.6	5533.7	5459.5	5428.6	5407.8	5021.8	4860.5	4067.8
32.5°	6690.7	6625.4	6476.0	6186.9	5947.8	5820.9	5718.6	5644.3	5316.3	5155.0	4285.3
35°	7127.3	7066.7	6895.4	6580.1	6320.0	6185.2	6051.0	5892.5	5622.5	5459.5	4519.0
37.5°	7526.0	7465.3	7230.6	6902.7	6640.8	6547.5	6427.9	6158.8	5929.6	5775.6	4766.4
40°	7777.8	7764.3	7545.0	7173.6	6901.7	6855.5	6815.6	6467.7	6270.2	6127.1	5038.2
42.5°	7842.2	7872.0	7698.1	7392.8	7133.7	7096.5	7189.9	6817.5	6652.6	6515.8	5346.2
45°	7687.2	7773.3	7659.1	7451.6	7298.5	7278.6	7521.4	7199.8	7075.7	6950.6	5717.7
47.5°	7294.9	7440.8	7393.6	7364.7	7342.9	7429.0	7813.2	7605.7	7555.0	7446.2	6141.6
50°	6503.1	6779.5	6861.9	7044.9	7255.1	7545.8	8078.6	8048.7	8114.8	8005.2	6658.0
52.5°	5134.1	5514.7	5993.1	6451.5	6985.1	7506.9	8370.4	8684.7	8963.7	8904.0	7478.8
55°	4238.2	4409.3	4777.2	5617.9	6461.4	7342.9	8501.7	9198.3	9806.3	9752.9	8101.3
57.5°	3549.6	3702.7	3929.2	4631.4	5669.6	6970.6	8583.2	9511.9	10383.5	10377.9	8715.5
60°	2811.3	2973.4	3205.4	3702.7	4744.6	6327.3	8565.1	9868.8	11119.9	11165.2	9464.7
62.5°	1977.7	2156.2	2413.6	2877.4	3799.7	5493.8	8195.5	10127.0	11987.0	12110.2	10366.2
65°	1300.1	1417.9	1611.7	2012.2	2831.2	4422.1	7489.7	10160.5	12914.7	13123.1	11212.4
67.5°	911.4	956.7	1070.8	1288.3	1866.3	3391.1	6365.4	9813.6	13533.5	13768.1	11579.3
70°	711.1	733.8	791.8	878.8	1172.3	2280.3	4877.8	8911.1	13401.3	13645.8	11196.1
72.5°	614.3	636.0	657.7	668.6	786.4	1407.8	3304.1	7450.7	12155.5	12321.3	9734.7
75°	557.2	562.6	580.8	577.1	599.7	913.3	1907.1	5428.6	9590.7	9533.6	7186.2
77.5°	468.4	475.6	505.5	501.0	532.7	624.2	990.3	3503.4	6217.8	5830.0	3999.9
80°	396.8	400.5	433.1	427.6	463.0	452.1	505.5	1785.7	2637.3	2234.1	1153.3
82.5°	137.7	170.4	330.7	340.6	353.3	273.6	291.7	728.4	805.4	616.9	241.9
85°	67.0	71.5	168.5	239.1	238.3	137.7	142.3	260.0	253.7	199.4	80.7
87.5°	10.9	13.6	19.9	93.3	74.3	36.3	48.9	50.7	52.6	45.3	18.1
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°	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3	2059.3
2.5°	2082.0	2036.7	1941.6	1853.6	1784.7	1718.6	1681.5	1649.7	1631.7	1628.0	1628.0
5°	2138.1	2044.8	1871.8	1725.9	1630.8	1560.0	1522.9	1499.4	1487.6	1480.4	1479.5
7.5°	2218.7	2082.0	1835.5	1669.7	1570.1	1519.4	1500.3	1496.7	1495.8	1496.7	1499.4
10°	2330.1	2142.7	1831.9	1656.1	1572.8	1544.7	1543.8	1544.7	1548.4	1549.2	1550.1
12.5°	2450.7	2205.2	1846.3	1667.9	1607.2	1591.8	1589.1	1588.1	1590.9	1592.7	1593.6
15°	2582.1	2287.6	1870.8	1693.3	1645.2	1628.9	1626.3	1620.8	1619.9	1619.0	1618.1
17.5°	2717.1	2369.1	1898.0	1720.5	1669.7	1647.1	1637.1	1624.4	1614.5	1611.7	1614.5
20°	2853.8	2449.8	1917.1	1734.0	1671.6	1639.8	1619.9	1598.2	1581.0	1570.9	1574.6
22.5°	2999.7	2534.0	1928.8	1730.4	1655.2	1611.7	1575.5	1550.1	1523.9	1506.6	1507.6
25°	3141.9	2607.4	1927.9	1711.3	1623.5	1568.2	1522.0	1489.4	1453.1	1435.1	1435.1
27.5°	3278.8	2673.5	1905.3	1677.8	1578.2	1516.6	1461.3	1422.4	1387.0	1369.8	1368.9
30°	3420.0	2728.8	1869.9	1628.9	1524.8	1456.8	1396.2	1362.6	1330.9	1314.6	1313.6
32.5°	3560.4	2779.5	1820.1	1568.2	1463.2	1397.9	1338.1	1307.3	1288.3	1288.3	1289.2
35°	3709.1	2814.9	1754.0	1497.6	1397.9	1335.4	1288.3	1270.2	1268.3	1257.5	1254.8
37.5°	3865.8	2837.5	1673.3	1425.1	1333.6	1274.7	1260.2	1238.5	1220.4	1196.8	1193.2
40°	4030.7	2860.2	1576.4	1349.9	1265.7	1233.1	1226.7	1197.7	1146.1	1088.0	1079.9
42.5°	4230.9	2875.5	1475.8	1274.7	1194.1	1183.2	1192.3	1142.5	1060.0	1016.5	1017.4
45°	4462.8	2901.0	1383.4	1200.4	1120.7	1120.7	1158.8	1093.5	1025.6	998.4	1003.0
47.5°	4763.6	2959.8	1297.3	1118.9	1052.8	1070.8	1084.4	1034.6	996.6	963.1	962.2
50°	5198.5	3101.1	1208.6	1036.5	1001.1	1037.3	1018.3	989.3	944.9	917.8	915.0
52.5°	5738.5	3184.5	1129.8	962.2	956.7	992.9	965.8	938.6	905.1	868.8	861.6
55°	6106.3	3199.9	1063.6	907.7	926.8	923.2	913.3	888.8	870.6	822.7	823.5
57.5°	6517.6	3230.7	1009.2	875.1	907.7	868.0	864.3	843.5	819.9	787.3	776.4
60°	7009.6	3278.8	962.2	862.5	891.4	831.7	813.5	805.4	781.9	765.6	770.1
62.5°	7545.8	3322.2	914.1	864.3	872.5	796.3	769.2	766.5	751.9	746.5	746.5
65°	7911.9	3203.5	854.3	862.5	842.6	760.1	725.7	724.8	713.0	711.1	710.3
67.5°	7784.2	2827.6	773.7	837.1	811.8	723.9	685.8	682.2	666.8	667.7	667.7
70°	7144.6	2291.2	662.3	774.6	773.7	691.3	644.1	632.3	611.5	615.2	618.8
72.5°	5945.0	1697.8	512.8	670.5	713.0	661.3	596.1	577.1	550.8	554.4	553.6
75°	4293.4	1154.3	373.3	510.0	620.6	626.1	549.0	516.4	484.7	490.2	491.9
77.5°	2197.0	654.2	274.5	351.5	487.4	569.0	506.5	463.0	455.7	506.5	499.2
80°	716.6	328.0	190.2	246.4	319.8	465.7	443.9	394.1	392.3	404.1	347.0
82.5°	213.8	138.6	122.3	162.2	176.7	356.9	383.2	298.1	256.4	270.0	279.0
85°	73.4	67.0	69.8	80.7	84.3	209.3	268.1	197.5	186.7	205.6	203.0
87.5°	17.2	23.6	19.9	18.1	18.1	50.7	104.1	82.4	114.2	76.1	73.4
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)