

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: P959953

Luminaire Tested: **NAV-SB1B-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4974.3 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

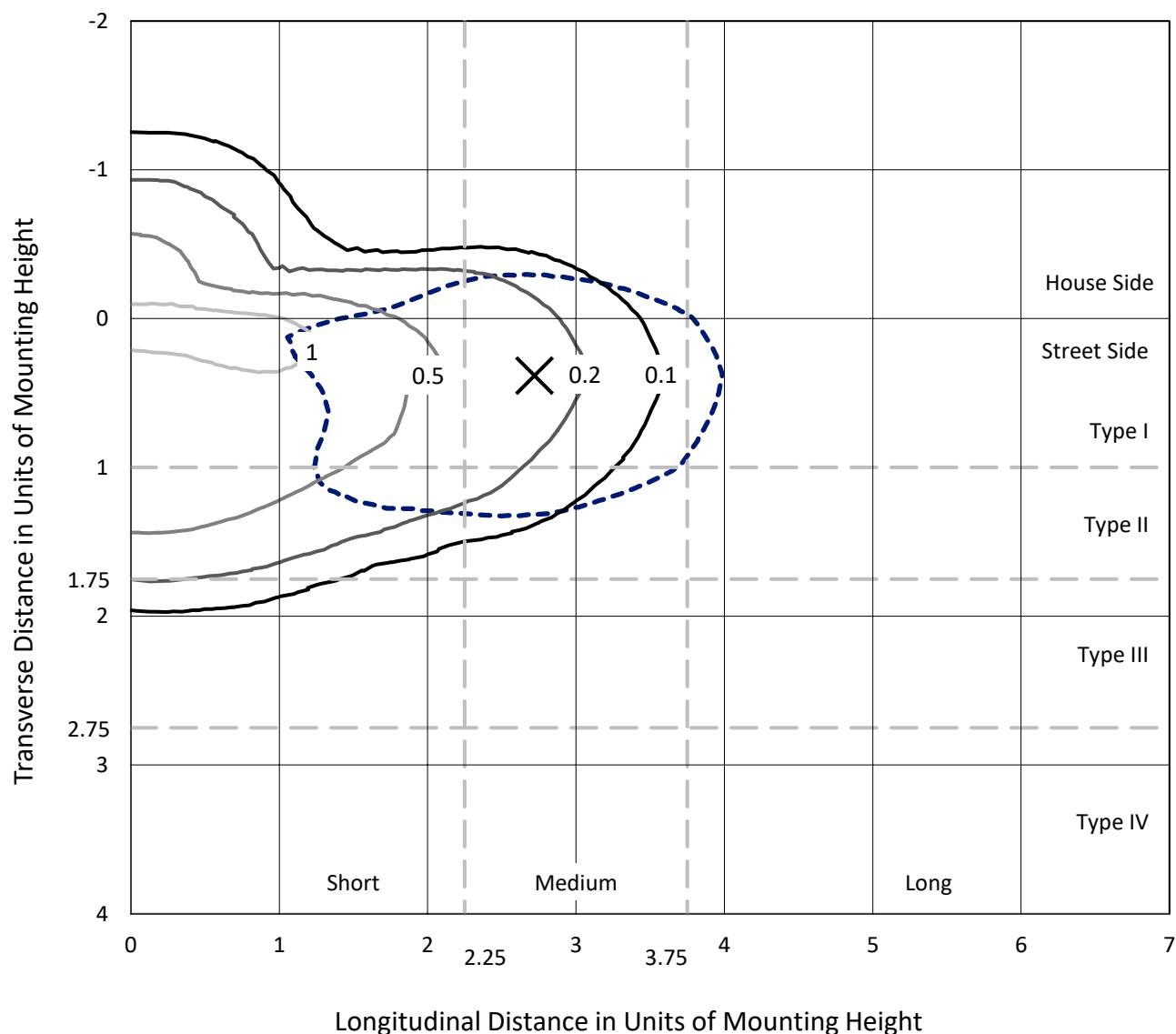
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

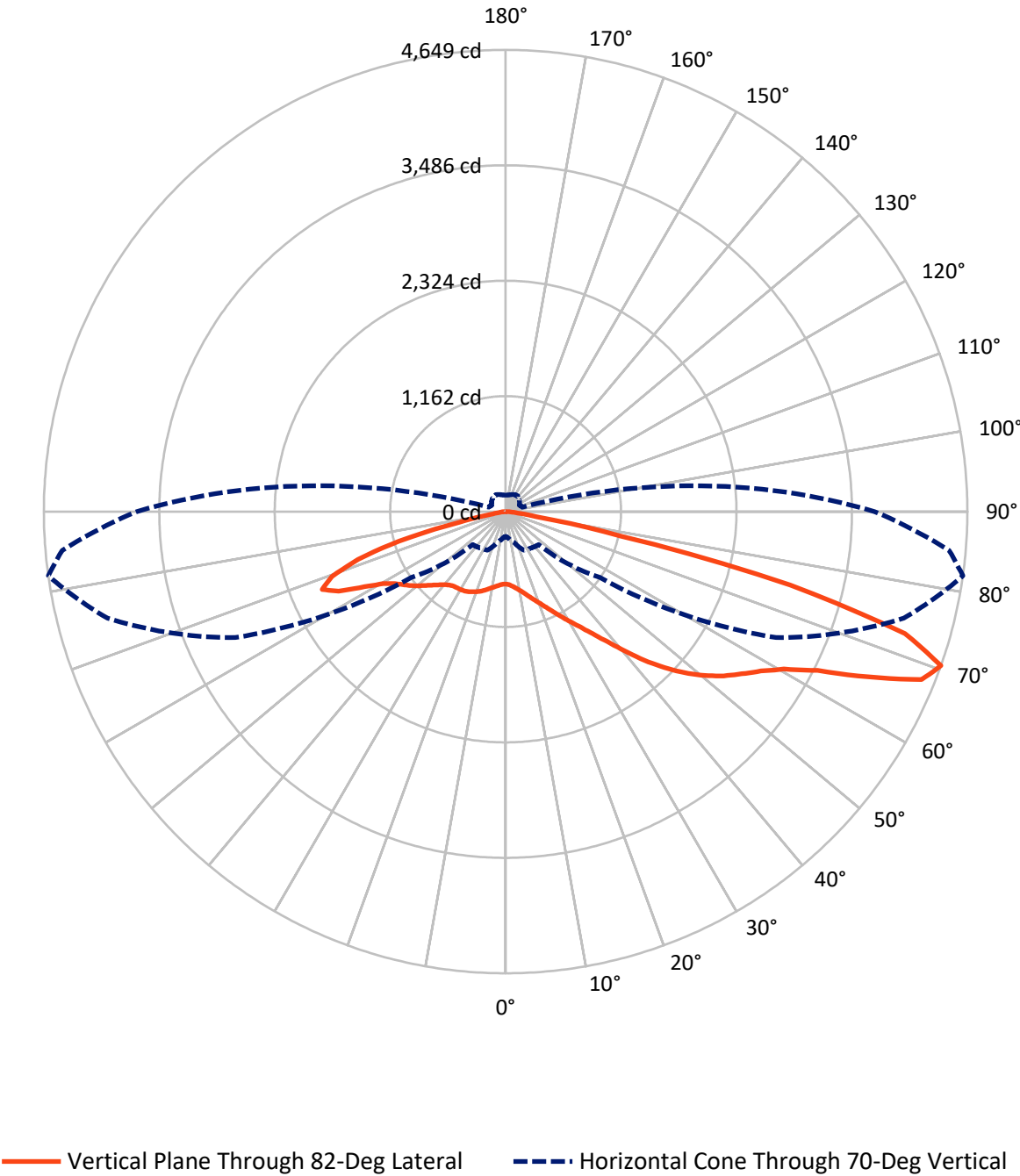
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1226.3	0.0	1226.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3748.0	0.0	3748.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	4974.3	0.0	4974.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	1.4
10°-20°	197.8	4.0
20°-30°	331.0	6.7
30°-40°	517.0	10.4
40°-50°	823.4	16.6
50°-60°	1145.9	23.0
60°-70°	1198.7	24.1
70°-80°	626.5	12.6
80°-90°	65.1	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°	4974.3	100.0
0°-180°	4974.3	100.0

Coefficient of Utilization



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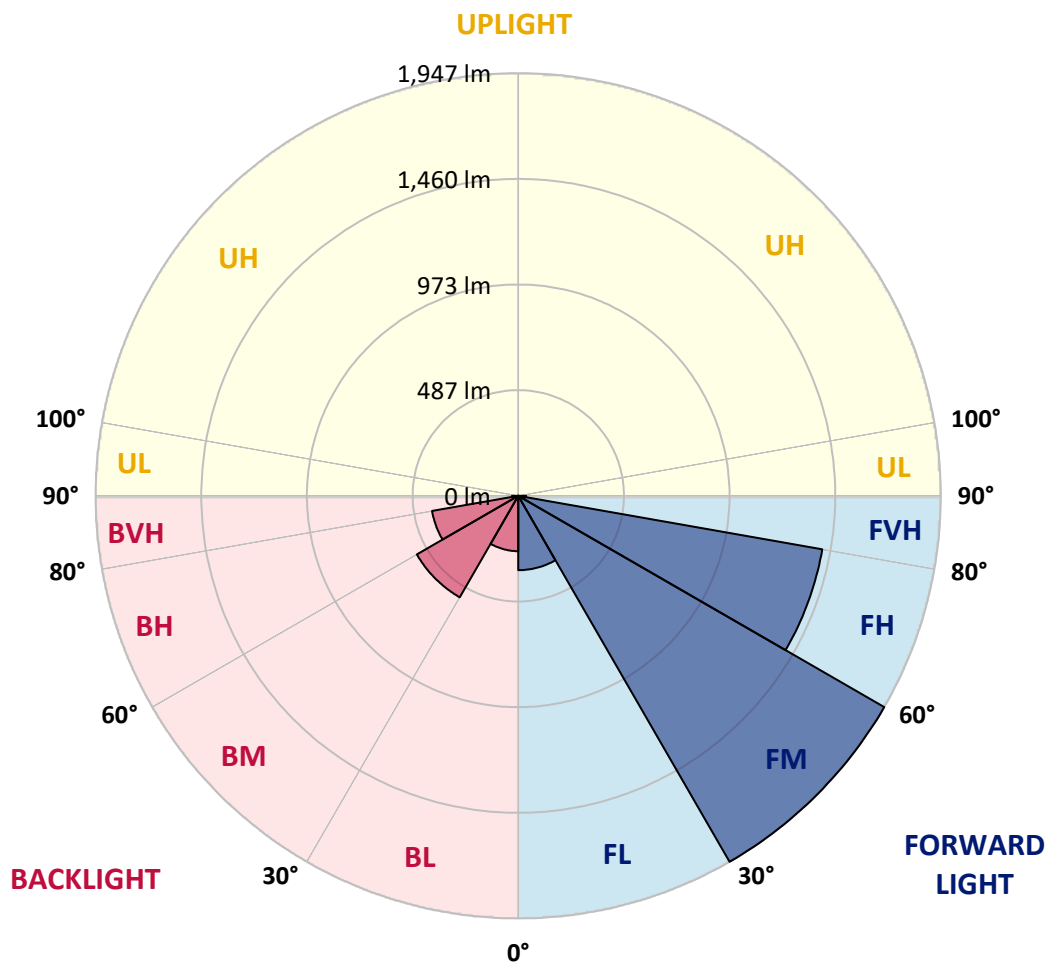
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	342.5	6.9			
FM	(30°-60°)	1946.9	39.1			
FH	(60°-80°)	1422.2	28.6			G1/1800
FVH	(80°-90°)	36.4	0.7			G1/100
BL	(0°-30°)	255.1	5.1	B1/500		
BM	(30°-60°)	539.5	10.8	B1/1000		
BH	(60°-80°)	403.0	8.1	B1/500		G1/500
BVH	(80°-90°)	28.6	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3
2.5°	746.7	750.9	749.6	748.4	748.4	746.4	746.2	743.5	741.5	738.0	737.2
5°	756.2	760.8	760.1	761.3	764.6	765.5	766.3	764.6	760.4	756.2	754.4
7.5°	747.7	752.8	754.4	760.8	771.3	780.7	787.9	790.8	786.8	780.7	777.9
10°	719.2	724.8	730.3	745.4	764.1	786.6	805.5	816.9	816.1	810.4	805.3
12.5°	661.4	667.3	679.2	708.5	742.7	782.4	817.7	841.5	849.6	845.4	836.7
15°	615.3	620.3	629.2	659.4	704.0	764.1	822.3	868.4	889.3	886.8	876.3
17.5°	614.0	616.0	621.6	635.9	670.1	735.6	817.4	894.8	934.7	934.4	921.2
20°	637.1	638.0	641.1	644.0	663.6	714.0	805.3	916.7	985.6	985.6	971.4
22.5°	669.4	668.8	672.0	669.4	678.9	712.2	797.7	935.9	1042.3	1046.5	1028.6
25°	717.7	715.0	714.2	708.2	710.0	729.3	806.1	957.9	1109.7	1118.4	1095.9
27.5°	782.1	777.9	775.0	761.0	756.2	764.6	832.0	984.3	1184.6	1199.7	1171.2
30°	866.0	858.3	854.1	829.8	812.7	814.1	871.0	1019.4	1263.0	1287.3	1251.1
32.5°	980.6	968.7	957.4	917.5	886.1	875.8	921.5	1067.9	1348.0	1386.8	1340.4
35°	1108.8	1099.3	1087.2	1025.7	977.4	953.7	989.5	1135.8	1447.5	1509.0	1448.5
37.5°	1232.4	1224.2	1230.0	1147.2	1084.9	1050.2	1078.8	1226.8	1570.2	1661.0	1584.2
40°	1360.2	1353.8	1354.6	1275.4	1202.8	1164.0	1186.9	1341.1	1710.9	1841.8	1747.3
42.5°	1499.0	1494.2	1478.4	1408.1	1326.7	1290.5	1311.6	1473.1	1861.9	2047.7	1926.3
45°	1654.5	1651.6	1636.7	1556.3	1462.8	1422.2	1450.7	1618.8	2013.7	2241.5	2106.1
47.5°	1788.8	1791.2	1789.3	1721.5	1624.6	1565.0	1599.0	1770.9	2154.9	2423.6	2278.5
50°	1853.5	1865.9	1884.1	1862.9	1802.8	1742.1	1748.6	1917.6	2289.5	2594.4	2443.7
52.5°	1819.7	1843.2	1892.8	1926.6	1949.9	1937.1	1919.4	2063.3	2416.2	2748.5	2599.9
55°	1693.8	1726.8	1809.1	1890.7	2009.2	2101.4	2124.5	2224.9	2539.7	2884.2	2747.7
57.5°	1464.4	1518.0	1591.9	1756.8	1956.4	2180.8	2363.6	2448.9	2670.6	3029.1	2902.4
60°	1071.1	1142.9	1234.7	1480.2	1771.6	2138.3	2567.2	2793.1	2856.8	3216.8	3103.8
62.5°	685.5	729.8	814.3	1045.5	1380.5	1920.5	2629.5	3223.4	3172.2	3524.6	3405.8
65°	469.3	497.8	575.1	705.0	892.5	1429.6	2462.7	3545.9	3673.2	4012.4	3922.1
67.5°	341.0	362.6	428.7	542.4	581.5	845.9	1911.0	3531.1	4160.2	4514.9	4374.5
70°	248.7	263.9	319.4	428.7	447.4	470.6	1157.7	3001.6	4149.6	4648.5	4480.3
72.5°	184.2	194.7	232.1	332.6	362.1	317.8	573.1	2181.6	3565.8	4204.4	4069.6
75°	133.2	141.2	168.7	254.4	289.9	242.0	285.9	1274.9	2487.3	2957.5	2981.3
77.5°	101.9	107.9	125.9	186.3	232.1	181.6	177.3	586.5	1179.4	1185.1	1251.6
80°	81.8	85.8	95.5	131.2	177.9	135.9	115.6	236.8	372.7	315.4	331.0
82.5°	60.2	66.8	80.8	92.1	127.2	93.7	70.5	119.6	141.8	122.0	123.0
85°	34.3	38.8	48.8	66.0	81.3	57.3	40.4	53.1	66.0	54.1	48.3
87.5°	12.1	15.9	17.1	25.8	35.4	23.8	15.6	15.3	21.6	16.1	13.4
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°	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3	729.3
2.5°	734.6	733.3	728.0	720.9	713.5	706.3	704.0	698.9	695.5	693.6	695.8
5°	749.4	745.2	732.8	716.9	700.3	682.3	669.6	658.0	649.5	641.6	644.8
7.5°	770.5	763.1	741.7	714.0	684.4	654.6	632.4	615.5	604.1	596.8	598.4
10°	795.0	783.7	750.9	709.5	663.8	621.0	594.9	580.5	573.3	569.4	570.4
12.5°	823.3	807.2	760.4	699.3	632.4	583.6	565.7	561.4	561.7	561.9	562.5
15°	858.1	835.7	768.1	676.8	591.5	554.8	551.7	558.5	565.7	569.1	568.8
17.5°	897.4	865.7	769.5	639.8	551.3	536.4	546.4	561.2	571.9	576.8	577.8
20°	939.6	896.4	759.9	587.5	518.4	521.3	539.3	558.2	570.1	576.3	577.8
22.5°	988.0	929.1	737.2	532.7	491.5	504.9	526.0	544.6	557.0	563.0	564.6
25°	1043.1	965.8	701.6	486.5	468.2	486.5	507.6	522.9	532.9	538.4	540.1
27.5°	1104.3	1004.1	654.1	449.8	447.9	467.5	484.9	496.7	502.0	506.2	507.9
30°	1165.8	1038.9	596.6	422.1	430.2	448.7	461.1	466.4	468.0	468.7	470.6
32.5°	1232.4	1069.0	536.1	399.1	413.4	430.5	437.9	440.2	432.9	427.8	429.5
35°	1312.9	1101.2	476.9	380.9	396.7	411.5	413.9	411.7	403.0	392.8	393.3
37.5°	1412.4	1141.3	429.7	368.0	381.1	390.9	388.0	387.4	388.3	376.2	376.9
40°	1534.3	1193.6	395.1	357.9	368.5	370.5	362.4	366.8	370.8	352.4	352.9
42.5°	1669.7	1256.6	373.2	351.1	357.9	352.9	340.2	345.2	344.7	320.4	320.2
45°	1807.8	1325.3	365.6	346.0	348.2	338.1	324.1	325.4	314.4	292.4	293.3
47.5°	1945.0	1398.9	370.3	341.8	336.0	324.6	313.9	308.0	291.7	275.3	275.3
50°	2079.7	1476.3	387.8	333.3	319.4	312.8	304.8	294.6	277.2	263.1	262.1
52.5°	2204.6	1554.1	407.2	319.4	298.5	302.5	297.5	285.6	268.4	254.2	254.4
55°	2322.8	1632.0	414.9	300.1	279.0	293.6	290.6	268.7	248.2	236.5	235.4
57.5°	2451.6	1725.7	406.5	275.5	263.1	283.2	272.1	247.8	236.0	227.2	226.4
60°	2630.0	1872.8	388.3	245.2	248.2	267.9	248.9	238.8	225.9	216.2	215.7
62.5°	2926.5	2147.0	359.0	215.1	230.4	245.2	237.8	227.8	214.6	205.1	205.1
65°	3364.6	2528.2	303.8	191.7	210.6	223.0	225.9	215.9	202.2	192.2	192.7
67.5°	3734.1	2767.3	229.9	172.1	190.3	205.1	213.3	203.5	189.0	179.3	179.5
70°	3713.8	2593.6	175.5	152.8	172.4	187.4	197.9	190.3	174.8	165.5	166.3
72.5°	3298.6	2169.7	142.0	133.2	154.2	168.9	181.6	175.8	160.0	151.0	151.0
75°	2423.3	1540.2	113.5	113.5	131.4	149.6	163.7	160.0	145.4	139.1	137.2
77.5°	1021.5	646.2	89.0	94.2	109.3	128.5	146.0	147.3	134.6	142.6	129.4
80°	271.6	178.1	67.9	74.2	85.8	106.1	127.0	126.4	112.7	105.3	97.9
82.5°	103.4	70.2	48.3	52.3	62.0	81.3	100.6	103.7	90.0	77.9	77.9
85°	39.9	30.1	29.8	31.4	36.2	53.8	76.1	78.6	67.9	57.5	59.3
87.5°	10.2	9.0	11.1	10.6	16.6	28.8	43.6	45.1	41.4	24.0	34.3
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)