

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: P959816

Luminaire Tested: **NAV-SB1B-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5642.6 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

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



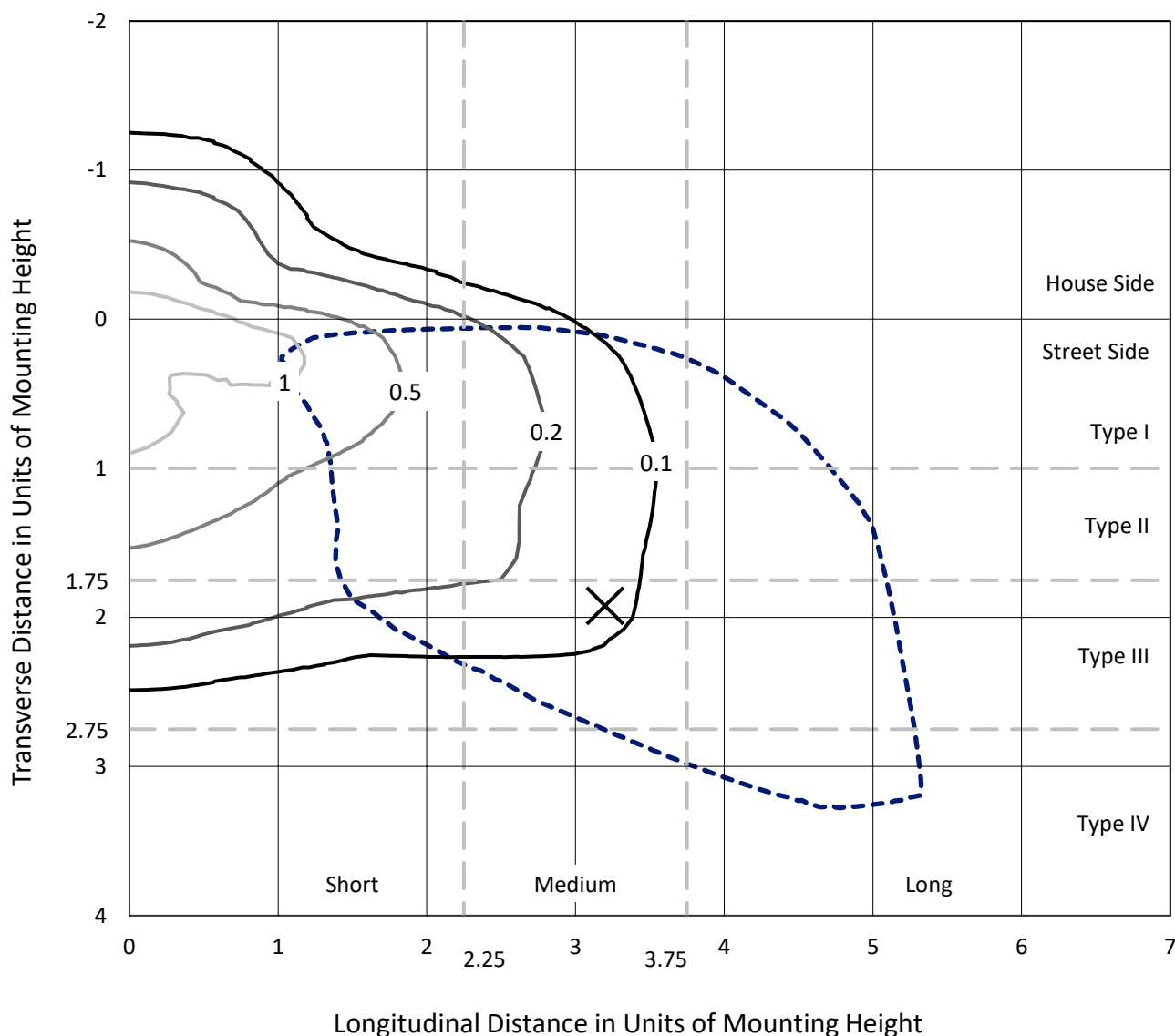
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

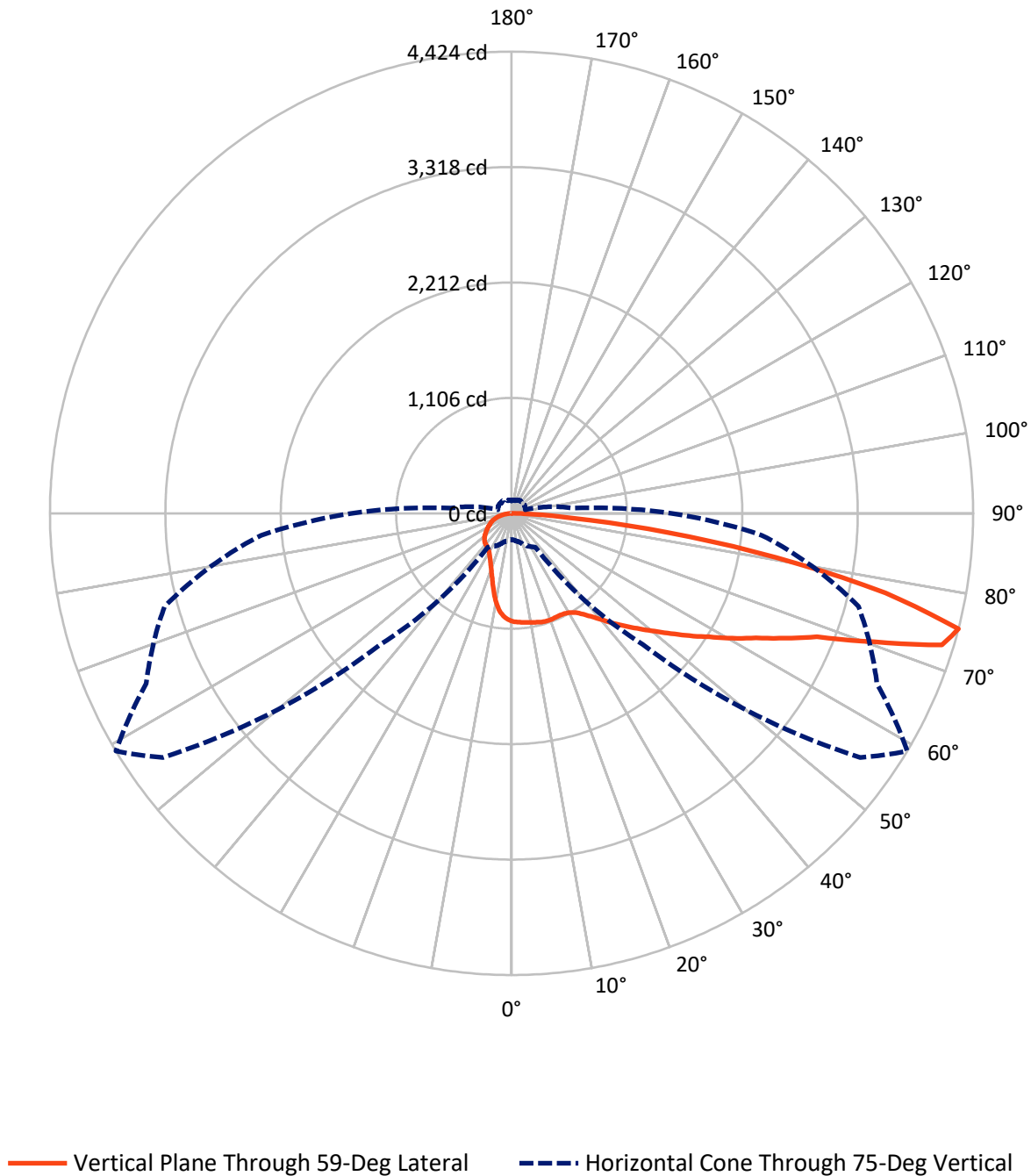
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1058.3	0.0	1058.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	4584.3	0.0	4584.3
	% Fixture	81.2	0.0	81.2
Total	Lumens	5642.6	0.0	5642.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	1.6
10°-20°	237.4	4.2
20°-30°	360.5	6.4
30°-40°	535.9	9.5
40°-50°	797.0	14.1
50°-60°	1081.9	19.2
60°-70°	1320.8	23.4
70°-80°	1036.6	18.4
80°-90°	179.6	3.2
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°	5642.6	100.0
0°-180°	5642.6	100.0

Coefficient of Utilization



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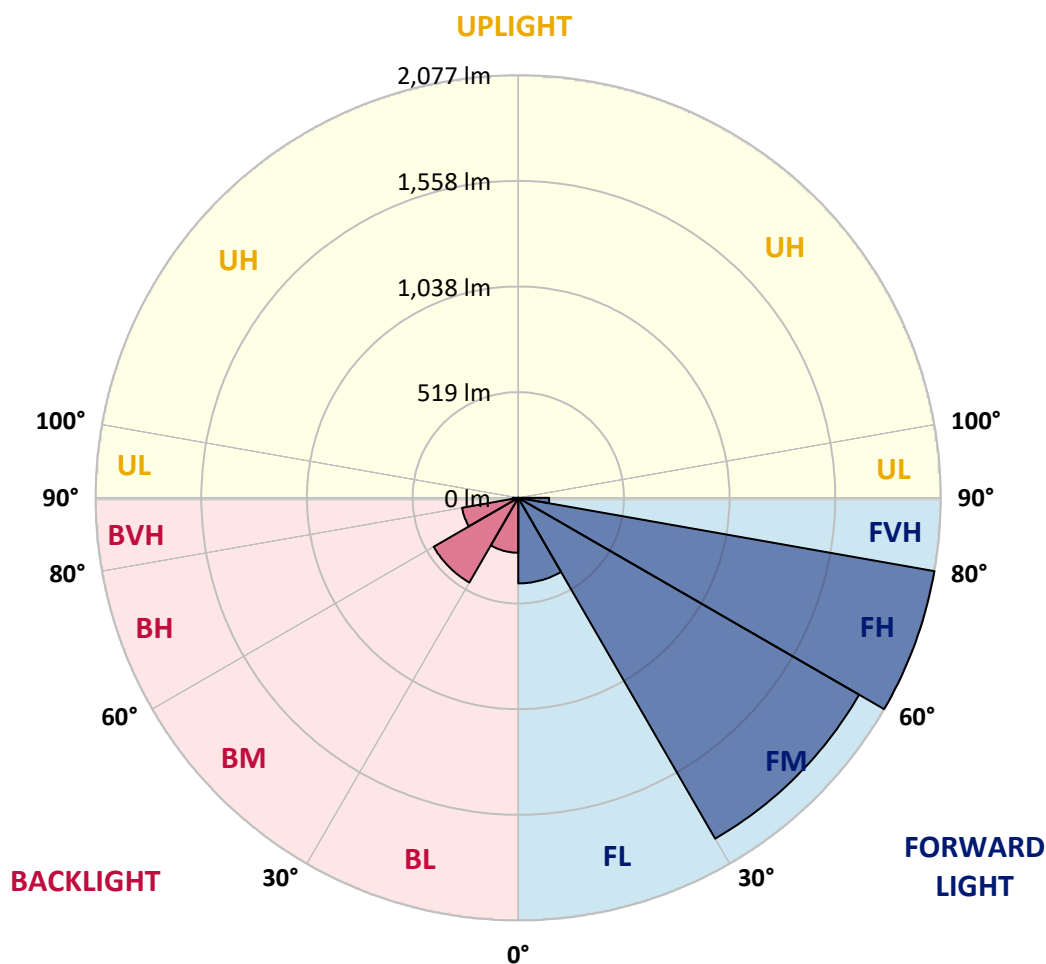
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	420.7	7.5			
FM	(30°-60°)	1934.5	34.3			
FH	(60°-80°)	2077.0	36.8			G2/5000
FVH	(80°-90°)	152.1	2.7			G2/225
BL	(0°-30°)	270.1	4.8	B1/500		
BM	(30°-60°)	480.4	8.5	B1/1000		
BH	(60°-80°)	280.4	5.0	B1/500		G1/500
BVH	(80°-90°)	27.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7
2.5°	1044.5	1040.9	1044.5	1042.9	1042.3	1041.2	1041.5	1043.6	1042.3	1043.9	1038.7
5°	1037.5	1035.4	1039.0	1038.1	1042.0	1042.6	1046.6	1049.1	1050.5	1050.8	1046.9
7.5°	1026.0	1023.9	1029.0	1033.3	1041.8	1044.2	1052.4	1056.4	1058.4	1062.1	1056.4
10°	983.8	982.9	995.6	1011.7	1031.8	1044.2	1056.7	1063.3	1066.6	1076.4	1069.7
12.5°	909.1	910.3	927.0	958.0	998.0	1038.1	1061.5	1071.2	1076.4	1088.6	1085.5
15°	837.7	837.5	855.7	888.8	944.9	1011.4	1063.9	1080.7	1089.4	1107.3	1104.9
17.5°	796.5	795.3	808.0	833.2	885.4	970.5	1057.8	1085.8	1104.6	1127.1	1124.9
20°	788.9	786.5	793.1	805.6	842.7	925.5	1042.0	1085.8	1116.7	1145.8	1144.6
22.5°	816.5	812.6	809.9	808.3	824.7	888.5	1024.2	1082.1	1134.7	1172.9	1170.8
25°	872.1	866.0	852.1	838.3	833.5	871.8	1008.4	1081.3	1161.3	1209.3	1201.4
27.5°	962.0	954.4	926.1	893.3	863.9	880.3	1001.4	1086.7	1190.8	1247.8	1232.0
30°	1073.4	1065.2	1029.6	979.2	926.4	911.8	1010.2	1102.8	1228.5	1299.2	1268.2
32.5°	1173.2	1164.1	1133.8	1082.4	1011.1	966.5	1038.1	1133.4	1287.6	1370.5	1322.6
35°	1261.9	1251.2	1223.8	1176.5	1114.9	1043.2	1088.6	1187.8	1371.8	1486.5	1396.3
37.5°	1348.7	1336.2	1306.5	1256.3	1213.3	1145.5	1158.0	1257.6	1483.4	1627.3	1494.0
40°	1445.8	1427.8	1391.7	1342.2	1300.4	1265.5	1249.4	1343.2	1596.9	1784.5	1616.1
42.5°	1539.9	1522.8	1479.8	1437.6	1385.1	1375.0	1355.4	1443.3	1721.1	1957.2	1739.9
45°	1641.2	1620.9	1568.8	1515.3	1482.3	1447.9	1458.0	1543.5	1842.8	2133.3	1869.8
47.5°	1736.2	1713.5	1651.9	1592.4	1574.2	1509.2	1552.1	1653.7	1969.4	2311.8	1998.5
50°	1787.6	1765.2	1713.8	1660.1	1645.8	1584.8	1654.0	1774.8	2102.1	2489.6	2122.1
52.5°	1830.3	1806.0	1739.0	1709.3	1705.0	1667.1	1779.7	1913.3	2234.7	2646.9	2241.4
55°	1875.9	1848.9	1763.3	1736.6	1756.0	1759.3	1928.7	2070.2	2374.9	2800.2	2354.0
57.5°	1928.4	1894.1	1786.7	1759.6	1805.7	1867.4	2099.9	2232.9	2512.7	2942.3	2454.2
60°	1977.8	1943.3	1831.6	1796.4	1859.6	1992.8	2296.3	2429.9	2668.8	3068.8	2548.9
62.5°	1987.6	1959.1	1867.4	1867.1	1932.3	2139.1	2528.8	2628.7	2805.0	3193.9	2633.8
65°	1819.5	1801.5	1747.2	1864.4	2036.8	2349.7	2787.8	2883.0	2978.3	3303.2	2708.6
67.5°	1384.8	1387.2	1383.2	1609.4	1952.4	2652.4	3162.6	3155.4	3192.4	3425.8	2794.5
70°	633.1	647.5	740.4	1111.0	1564.1	2687.2	3782.5	3688.1	3461.0	3584.5	2868.8
72.5°	342.1	353.0	390.9	538.2	940.3	2389.2	4245.7	4312.8	3818.2	3691.4	2787.2
75°	251.0	257.1	283.5	342.1	394.9	1775.7	4079.6	4423.8	3862.9	3442.2	2406.8
77.5°	187.9	190.6	212.2	271.1	202.1	936.1	3259.7	3663.8	3306.9	2828.1	1777.9
80°	136.3	139.3	155.4	203.4	141.8	342.3	2238.3	2571.6	2264.7	1802.8	886.0
82.5°	94.1	95.3	102.3	138.4	98.9	132.9	1270.1	1508.0	1264.2	632.6	239.2
85°	56.8	58.3	61.3	80.8	56.2	63.1	548.2	567.0	377.9	151.2	74.4
87.5°	23.4	24.9	27.4	34.0	22.1	17.6	90.4	113.6	70.7	44.3	23.1
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°	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7	1035.7
2.5°	1037.2	1035.0	1029.3	1021.4	1014.1	1005.0	1001.1	997.7	994.8	988.9	986.3
5°	1043.6	1037.8	1022.3	1002.3	979.5	954.7	930.4	913.7	899.4	888.8	880.0
7.5°	1053.3	1042.3	1014.1	973.1	921.0	867.6	819.3	784.9	759.1	749.8	733.4
10°	1063.3	1050.2	1001.1	928.9	838.7	756.4	692.4	657.1	636.5	629.9	619.5
12.5°	1075.1	1056.1	980.7	867.3	746.7	656.6	600.8	580.0	569.5	565.8	566.7
15°	1092.4	1060.9	950.1	790.2	659.0	583.7	547.6	533.3	527.9	527.6	528.8
17.5°	1105.5	1061.8	902.4	707.6	591.6	539.7	509.9	504.5	508.1	513.6	515.7
20°	1120.1	1053.6	839.9	632.3	544.3	501.1	488.7	492.3	501.1	509.0	511.8
22.5°	1130.4	1038.7	764.3	573.7	503.3	479.0	478.4	486.0	490.9	494.8	496.9
25°	1139.5	1013.5	684.2	524.5	469.6	465.7	472.3	469.9	466.6	469.9	472.0
27.5°	1146.2	973.7	612.5	481.4	445.9	456.5	452.5	447.1	446.8	448.6	451.7
30°	1144.1	920.7	553.7	440.4	429.2	439.5	430.1	429.2	428.3	429.2	432.6
32.5°	1144.1	860.3	508.4	412.3	418.6	414.6	413.7	411.6	408.0	407.6	411.6
35°	1150.5	799.8	469.6	397.1	409.8	400.4	401.0	395.9	388.3	384.6	388.3
37.5°	1163.5	751.2	431.0	389.7	394.3	394.0	391.5	382.7	369.4	357.8	361.8
40°	1195.0	737.0	404.7	386.4	387.0	390.6	384.3	367.3	336.9	318.2	320.5
42.5°	1244.6	761.0	398.8	378.2	382.1	385.8	373.4	333.9	312.3	301.1	301.1
45°	1307.4	802.9	411.3	366.3	370.6	377.0	340.0	321.1	311.4	311.7	313.2
47.5°	1386.9	846.9	434.4	356.1	353.9	357.6	317.9	306.3	292.9	296.2	304.7
50°	1478.9	891.5	456.2	342.1	335.4	323.6	303.5	292.6	275.6	267.7	269.9
52.5°	1578.4	934.6	465.0	325.1	315.4	301.8	293.9	280.4	259.8	246.8	246.5
55°	1672.8	973.7	455.3	304.7	295.3	284.7	283.5	275.3	253.2	234.9	234.9
57.5°	1762.1	1006.6	431.0	284.1	275.0	268.7	276.9	272.9	245.0	221.6	220.4
60°	1837.6	1029.0	395.9	263.2	256.8	253.5	265.9	264.7	233.4	207.4	206.4
62.5°	1897.8	1037.8	357.0	243.1	241.6	235.5	250.7	250.7	218.8	193.3	192.5
65°	1944.8	1029.3	317.5	223.4	226.4	217.3	232.2	230.4	203.4	180.9	179.7
67.5°	1986.3	1001.4	273.8	204.0	210.9	199.5	212.8	208.5	186.3	168.5	167.3
70°	2004.9	936.4	224.1	184.6	193.0	181.8	193.3	185.4	167.3	155.1	152.7
72.5°	1856.2	778.3	176.4	164.2	171.5	162.4	172.4	163.3	146.6	141.1	136.6
75°	1535.7	584.0	135.7	142.1	147.5	140.5	147.2	140.5	125.4	129.4	118.1
77.5°	1115.2	394.3	103.8	118.7	121.2	117.5	123.2	115.6	102.0	101.1	96.6
80°	554.5	231.0	81.4	93.8	92.9	90.4	97.2	93.5	82.0	86.8	85.9
82.5°	160.6	98.9	59.1	65.9	64.1	64.7	69.5	71.3	106.8	106.0	108.3
85°	50.4	38.8	35.5	36.7	35.0	35.8	41.0	81.4	75.2	44.0	47.7
87.5°	13.0	13.3	8.8	9.4	9.7	11.6	13.0	49.5	23.7	15.5	16.4
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)