

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: P959842

Luminaire Tested: **NAV-SB1B-740-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6212.5 lumens
Efficiency: N/A
Efficacy: 156.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

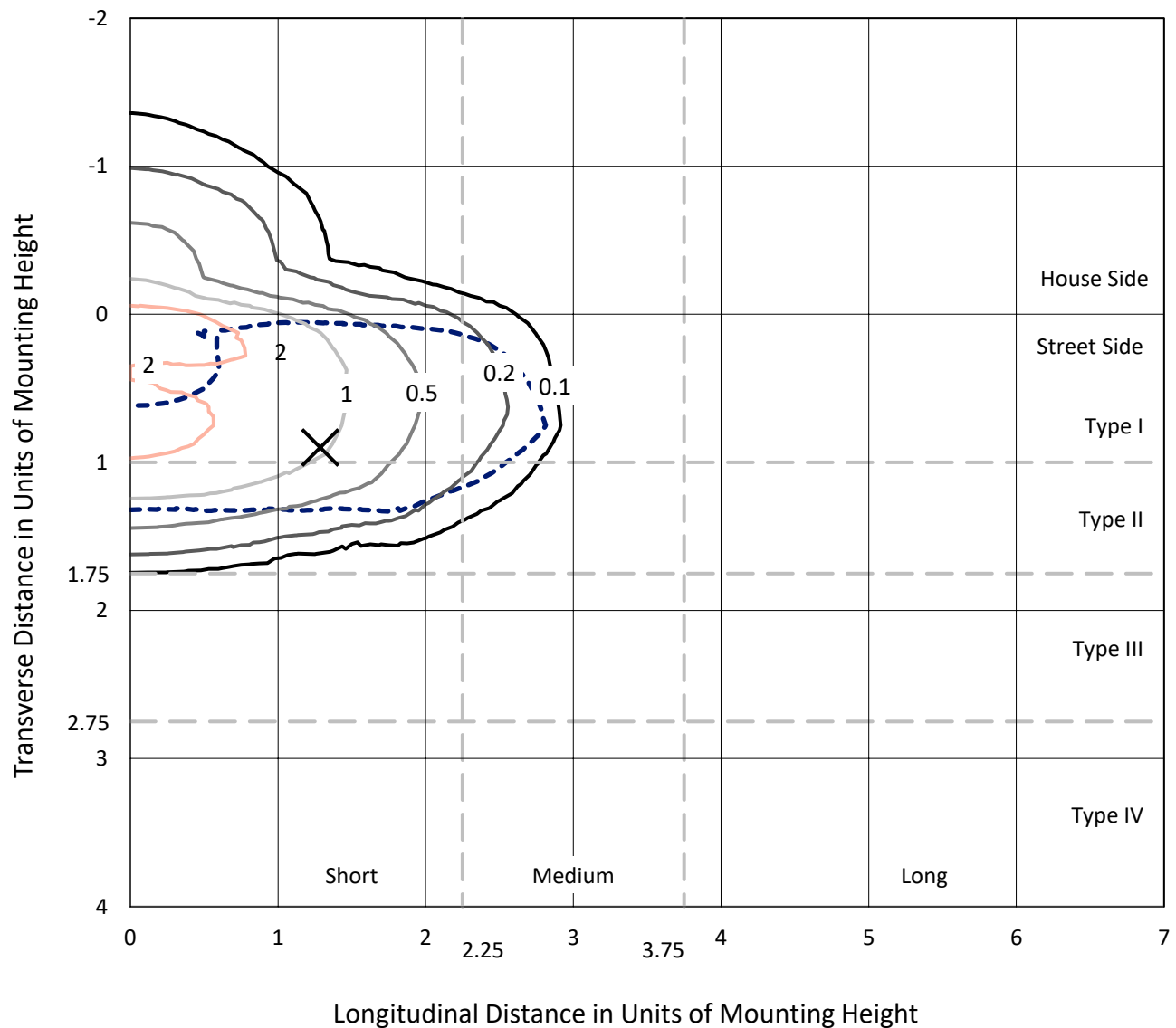
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

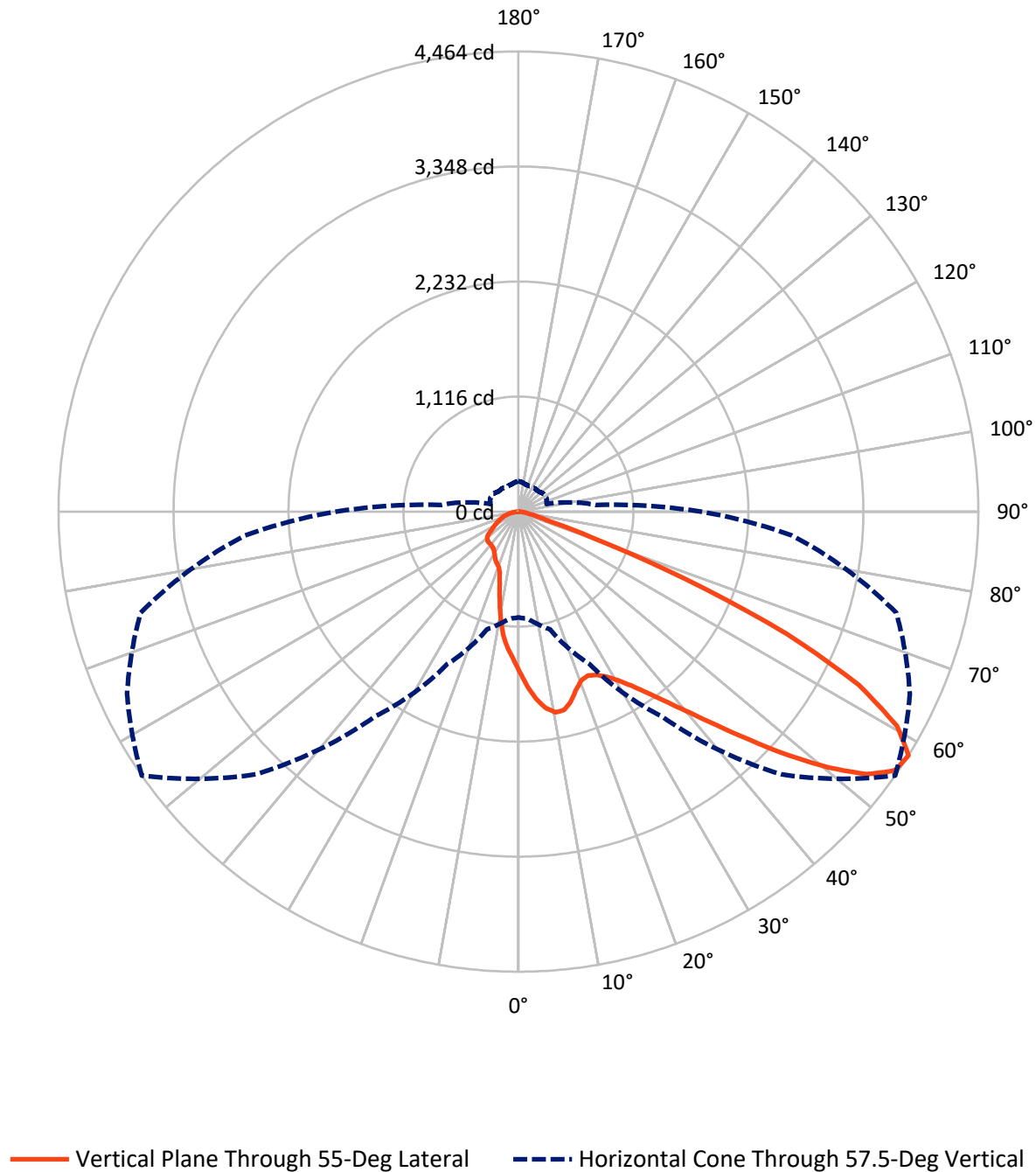
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1124.1	0.0	1124.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5088.4	0.0	5088.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	6212.5	0.0	6212.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	2.3
10°-20°	364.6	5.9
20°-30°	581.8	9.4
30°-40°	921.1	14.8
40°-50°	1409.9	22.7
50°-60°	1510.1	24.3
60°-70°	950.0	15.3
70°-80°	280.9	4.5
80°-90°	49.7	0.8
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°	6212.5	100.0
0°-180°	6212.5	100.0

Coefficient of Utilization



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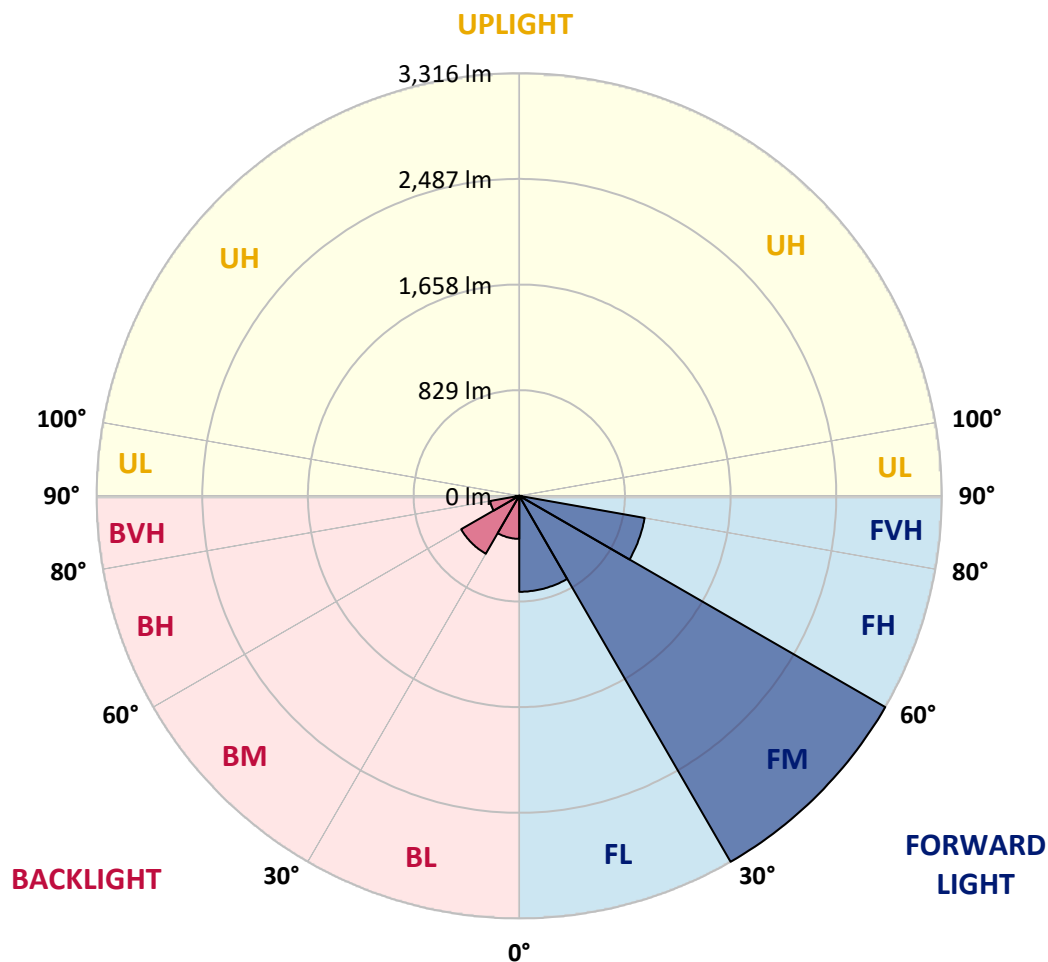
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	753.0	12.1			
FM	(30°-60°)	3315.7	53.4			
FH	(60°-80°)	998.8	16.1			G1/1800
FVH	(80°-90°)	21.0	0.3			G1/100
BL	(0°-30°)	337.9	5.4	B1/500		
BM	(30°-60°)	525.4	8.5	B1/1000		
BH	(60°-80°)	232.2	3.7	B1/500		G1/500
BVH	(80°-90°)	28.7	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7
2.5°	1786.0	1784.7	1791.7	1767.6	1751.3	1729.1	1699.9	1662.7	1622.5	1580.1	1561.8
5°	1946.9	1935.6	1943.0	1925.1	1907.0	1873.6	1830.2	1769.6	1695.4	1610.9	1566.0
7.5°	1921.5	1913.8	1932.7	1948.8	1962.3	1958.1	1926.3	1862.7	1767.0	1644.3	1579.1
10°	1716.9	1708.3	1734.9	1790.5	1872.1	1943.0	1981.5	1942.1	1840.3	1680.9	1592.0
12.5°	1536.5	1532.3	1549.9	1594.9	1685.4	1821.6	1974.5	2011.5	1916.3	1724.3	1609.4
15°	1459.4	1454.2	1465.4	1488.3	1546.1	1672.9	1910.3	2058.9	1991.2	1774.4	1636.9
17.5°	1442.3	1436.5	1441.4	1453.2	1490.5	1587.2	1813.2	2082.4	2069.3	1830.2	1660.1
20°	1473.8	1469.0	1469.6	1469.0	1495.0	1571.7	1745.8	2073.4	2137.3	1881.7	1682.5
22.5°	1549.9	1541.9	1542.2	1525.2	1539.3	1598.7	1728.2	2049.3	2198.0	1926.6	1699.6
25°	1673.9	1659.5	1662.3	1619.0	1615.1	1659.1	1755.8	2030.7	2258.4	1962.6	1702.8
27.5°	1843.5	1827.1	1818.5	1753.9	1723.0	1744.9	1812.0	2037.1	2315.6	1993.7	1694.7
30°	2055.4	2035.5	2017.8	1926.3	1870.4	1862.4	1899.3	2079.5	2383.0	2026.5	1680.9
32.5°	2315.3	2292.1	2260.0	2138.6	2059.9	2017.8	2012.4	2155.0	2462.0	2068.2	1673.9
35°	2624.5	2594.3	2548.8	2391.6	2292.1	2206.0	2161.4	2263.8	2570.2	2131.2	1681.9
37.5°	2943.1	2909.1	2867.3	2680.4	2558.0	2431.2	2343.1	2411.6	2714.4	2216.7	1703.1
40°	3237.0	3198.7	3159.9	2993.5	2862.2	2709.3	2565.8	2598.5	2890.7	2318.8	1739.1
42.5°	3410.4	3382.1	3367.3	3277.4	3176.0	3020.8	2842.5	2820.1	3088.9	2436.3	1780.2
45°	3402.7	3391.1	3436.7	3473.9	3449.8	3363.8	3166.9	3065.2	3287.7	2538.1	1818.0
47.5°	3220.9	3228.6	3330.4	3539.8	3632.0	3677.0	3536.2	3305.7	3460.5	2614.3	1835.1
50°	2726.3	2732.8	2968.5	3420.0	3678.8	3932.3	3902.7	3540.5	3594.4	2660.8	1831.3
52.5°	2334.8	2339.0	2440.1	3064.9	3524.1	4060.7	4232.8	3761.7	3692.4	2673.6	1809.7
55°	1758.7	1773.1	1886.5	2404.5	3121.3	3959.0	4433.9	3989.7	3754.4	2674.9	1787.3
57.5°	1027.4	1043.1	1183.2	1632.1	2426.1	3604.0	4464.4	4192.0	3796.4	2664.7	1773.8
60°	503.3	510.0	571.0	857.8	1496.0	2920.3	4219.1	4290.0	3819.9	2659.2	1773.1
62.5°	339.2	338.1	340.7	423.3	737.1	1876.2	3707.7	4118.6	3807.4	2638.4	1766.7
65°	291.6	288.1	278.5	297.0	381.8	858.1	2864.8	3606.6	3711.9	2586.0	1722.7
67.5°	252.2	252.5	252.8	246.9	272.6	396.0	1750.6	2841.0	3369.6	2338.0	1553.1
70°	208.8	211.7	212.9	212.9	222.2	259.8	747.3	1947.2	2657.9	1833.2	1250.9
72.5°	190.1	184.0	184.7	181.4	181.4	197.8	300.9	1103.8	1674.5	1031.3	763.4
75°	155.1	159.0	159.6	157.3	150.0	151.0	178.6	463.1	716.5	427.7	377.4
77.5°	134.0	134.0	135.2	133.6	127.8	113.1	119.1	179.5	243.7	175.4	188.5
80°	107.6	107.3	112.7	115.9	106.9	83.5	76.2	99.2	108.2	77.1	98.0
82.5°	52.4	55.6	77.4	88.4	81.3	60.4	46.5	61.7	57.8	34.0	44.0
85°	30.5	28.9	34.6	49.1	46.5	33.4	22.4	32.1	30.2	17.3	17.6
87.5°	9.6	9.0	7.1	16.7	13.5	9.3	6.1	9.3	8.3	3.9	3.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7	1556.7
2.5°	1539.0	1501.1	1463.5	1429.2	1408.2	1394.8	1381.3	1366.2	1360.4	1351.8
5°	1523.6	1450.4	1385.2	1328.9	1277.9	1237.8	1197.3	1164.5	1149.7	1159.7
7.5°	1514.5	1408.6	1308.1	1205.0	1105.8	1026.4	957.4	908.9	887.0	892.5
10°	1506.5	1361.4	1208.2	1045.4	902.8	804.5	733.8	696.9	683.1	686.0
12.5°	1499.2	1308.4	1087.7	873.5	722.0	657.1	636.8	637.1	639.7	641.6
15°	1497.9	1244.5	953.2	723.2	624.3	620.1	642.0	655.8	663.2	665.4
17.5°	1496.0	1168.1	816.1	620.8	600.5	628.8	649.0	658.0	663.8	664.2
20°	1488.3	1071.0	689.5	571.9	595.4	619.8	632.3	639.4	644.2	645.9
22.5°	1464.5	963.2	590.9	550.1	574.9	594.5	609.3	617.3	620.1	622.1
25°	1421.8	842.4	522.9	529.3	546.3	571.0	582.9	584.6	583.5	586.4
27.5°	1365.9	713.0	480.4	501.0	522.9	544.1	550.4	549.5	547.6	550.8
30°	1298.5	596.8	453.5	469.2	499.1	518.3	524.1	521.9	518.0	521.5
32.5°	1227.1	501.6	431.3	447.0	479.5	498.5	504.2	501.9	499.1	501.9
35°	1160.7	435.2	410.7	432.2	464.1	482.7	490.1	490.4	490.4	493.9
37.5°	1099.6	396.3	393.7	423.0	453.5	470.2	480.7	481.4	467.6	468.5
40°	1043.1	380.0	386.0	416.9	443.2	459.3	459.9	423.9	398.5	397.9
42.5°	996.9	376.7	388.3	416.3	435.8	436.4	391.1	363.3	356.2	356.5
45°	953.6	375.8	393.4	416.3	424.9	377.0	346.6	339.2	339.8	342.3
47.5°	905.1	371.9	394.4	410.4	393.4	335.3	326.3	323.1	321.8	322.5
50°	852.1	358.1	382.2	398.9	339.5	317.3	306.1	305.1	306.7	307.7
52.5°	796.1	335.6	361.3	378.0	314.8	301.6	289.0	291.3	298.4	300.6
55°	759.5	309.2	333.6	336.3	297.4	286.8	276.2	281.4	294.5	298.7
57.5°	749.9	281.4	302.2	299.3	275.2	274.0	267.5	272.0	288.7	294.8
60°	747.0	256.2	271.4	269.2	253.7	259.8	258.2	260.5	266.2	268.1
62.5°	724.6	236.4	243.7	240.6	234.4	245.1	248.9	244.1	248.6	250.8
65°	667.4	220.3	216.8	214.5	217.1	226.7	234.4	224.8	229.0	235.4
67.5°	573.0	198.4	188.8	191.4	199.5	204.6	214.5	203.6	207.2	218.0
70°	463.4	170.9	162.2	169.5	177.3	187.9	189.5	182.1	190.4	202.6
72.5°	327.9	142.9	136.8	151.9	154.5	168.3	164.7	161.2	172.8	176.9
75°	227.3	115.3	111.7	123.3	132.6	144.5	142.0	146.2	170.6	172.5
77.5°	143.9	89.6	87.3	94.7	107.6	120.7	124.9	172.5	291.3	302.9
80°	83.5	66.8	64.3	70.0	81.3	93.5	120.4	211.7	192.1	189.8
82.5°	46.5	45.9	42.7	44.3	54.3	67.4	170.3	149.0	121.1	124.9
85°	21.8	27.0	23.2	22.1	30.5	79.0	113.7	85.1	56.5	55.2
87.5°	5.7	5.1	5.1	5.7	12.8	68.1	45.3	36.3	21.5	20.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)