

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: P882916

Luminaire Tested: **NAV-SB3A-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9825 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

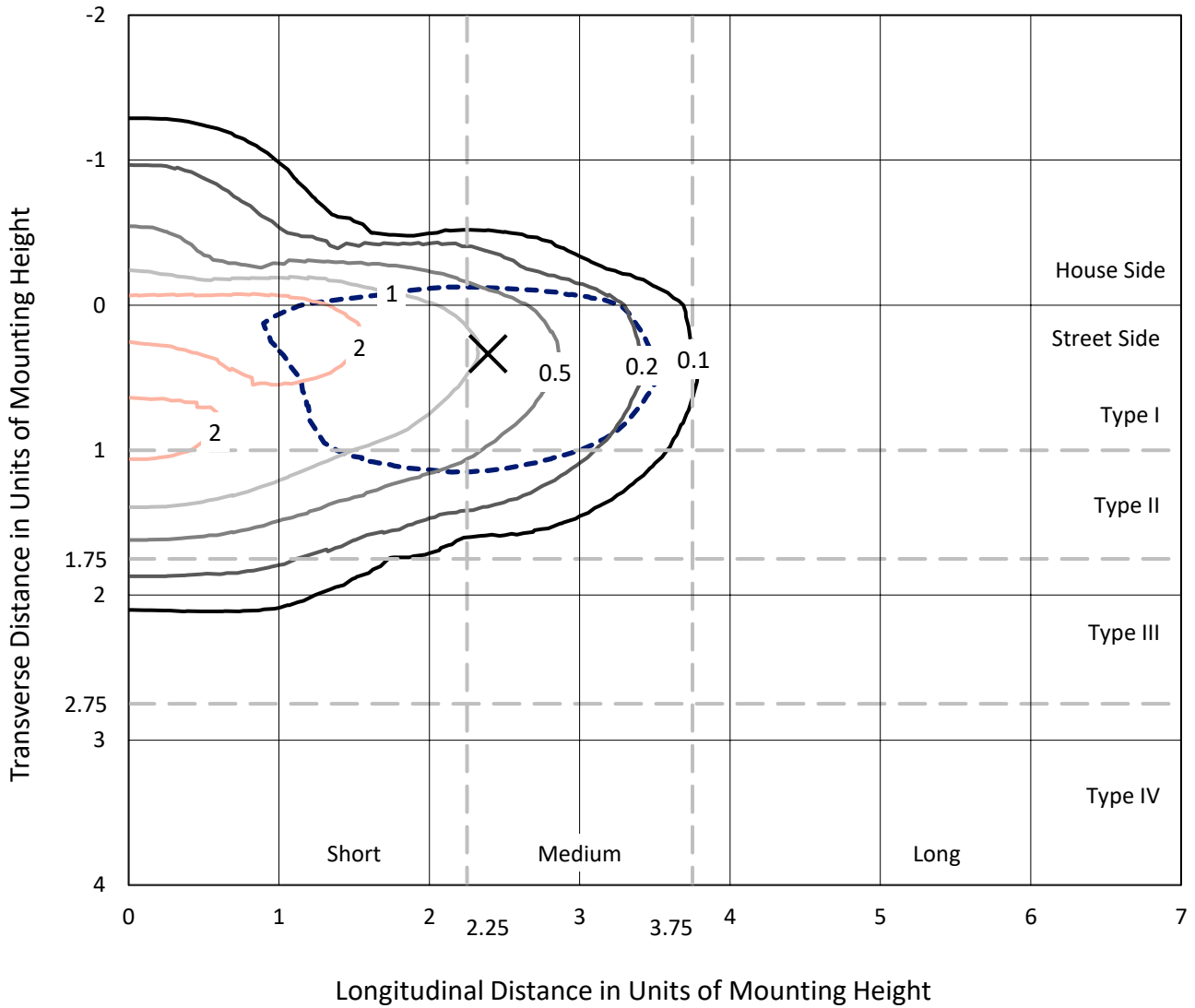
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

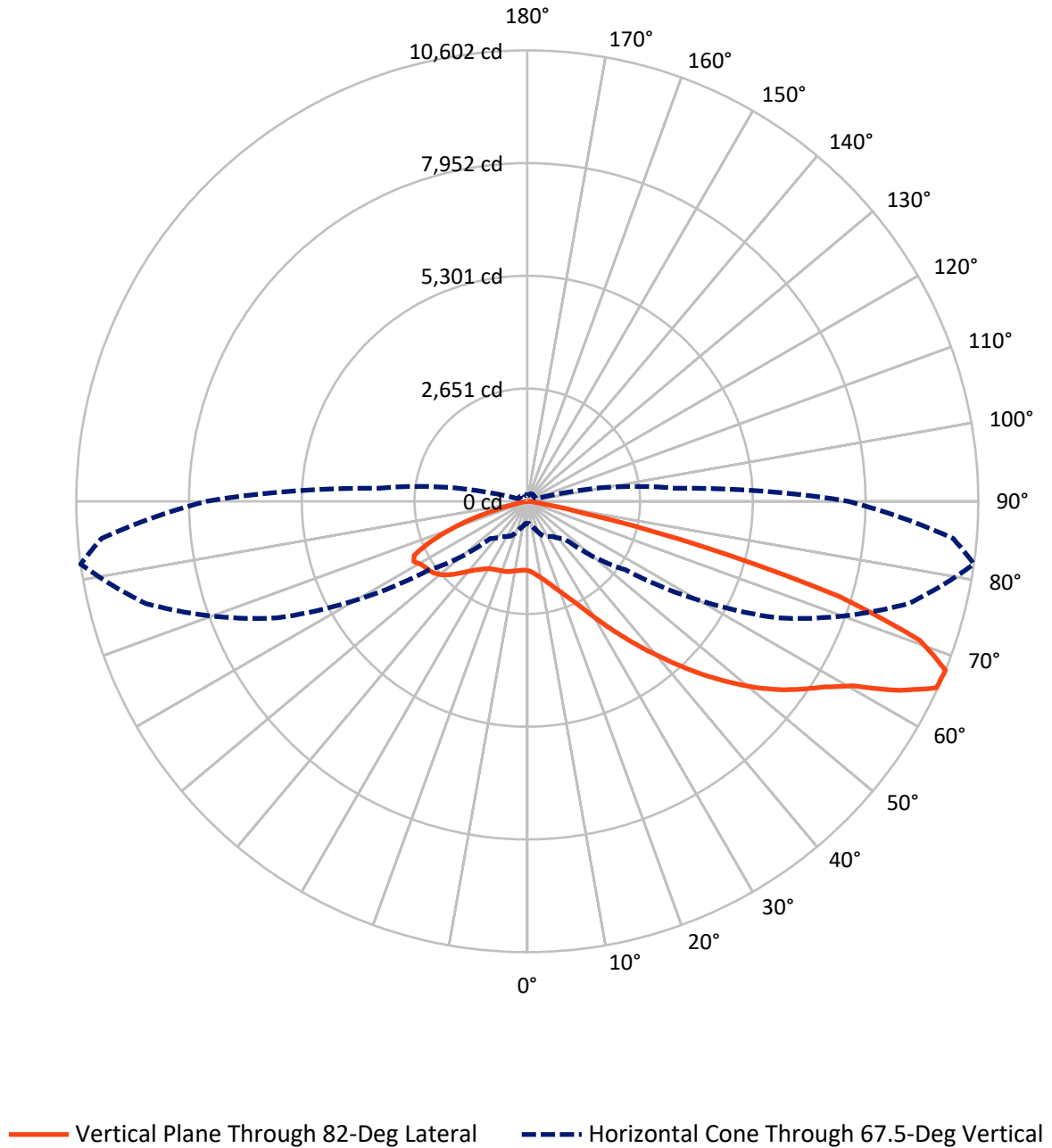
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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	1779.7	0.0	1779.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8045.3	0.0	8045.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	9825.0	0.0	9825.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	1.5
10°-20°	376.8	3.8
20°-30°	603.6	6.1
30°-40°	1067.3	10.9
40°-50°	1870.0	19.0
50°-60°	2494.0	25.4
60°-70°	2321.8	23.6
70°-80°	891.1	9.1
80°-90°	55.3	0.6
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°	9825.0	100.0
0°-180°	9825.0	100.0

Coefficient of Utilization



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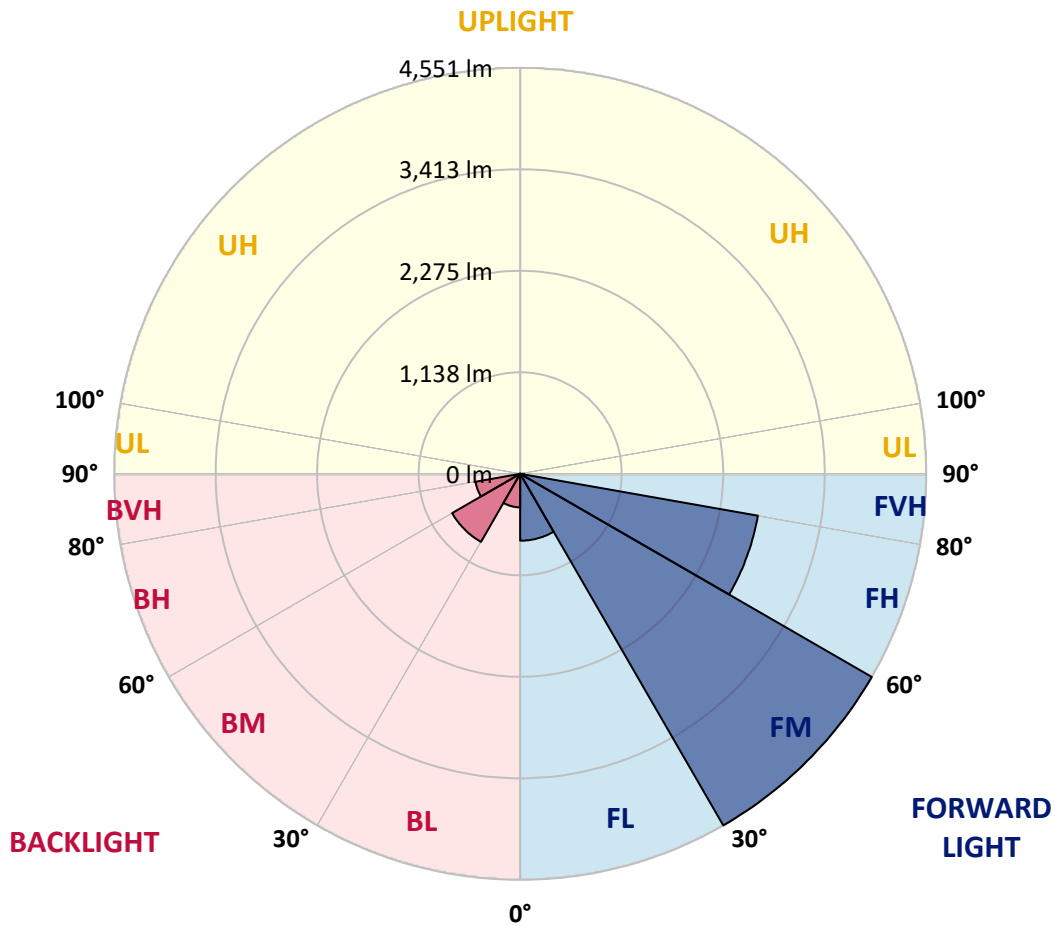
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	749.5	7.6			
FM (30°-60°)	4550.5	46.3			
FH (60°-80°)	2705.0	27.5			G2/5000
FVH (80°-90°)	40.2	0.4			G1/100
BL (0°-30°)	375.9	3.8	B1/500		
BM (30°-60°)	880.8	9.0	B1/1000		
BH (60°-80°)	508.0	5.2	B2/1000		G2/1000
BVH (80°-90°)	15.1	0.2			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°	82°	85°
0°	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7
2.5°	1720.3	1730.2	1724.6	1721.8	1716.8	1709.7	1704.1	1686.4	1668.0	1656.0	1651.7
5°	1755.0	1764.9	1764.2	1767.0	1770.6	1772.7	1771.3	1751.5	1725.3	1704.8	1692.7
7.5°	1725.3	1736.6	1745.8	1759.9	1784.7	1810.9	1823.6	1819.4	1792.5	1764.2	1749.3
10°	1641.1	1653.1	1675.1	1708.3	1760.7	1817.2	1864.6	1886.6	1869.6	1838.5	1818.0
12.5°	1486.9	1498.9	1542.1	1614.2	1701.9	1800.3	1890.8	1949.5	1953.8	1922.6	1898.6
15°	1313.6	1325.6	1371.6	1462.1	1595.8	1753.6	1905.0	2016.0	2053.5	2026.6	1997.6
17.5°	1206.1	1216.7	1251.3	1324.2	1463.6	1660.2	1900.0	2086.8	2172.3	2151.1	2116.5
20°	1173.5	1182.7	1199.0	1249.9	1365.9	1563.3	1867.5	2153.2	2300.4	2288.4	2249.5
22.5°	1208.2	1216.7	1221.6	1244.3	1317.1	1499.6	1826.4	2221.2	2448.9	2450.3	2403.0
25°	1288.1	1296.6	1291.0	1305.1	1336.9	1479.8	1810.9	2301.1	2635.7	2651.2	2597.5
27.5°	1419.7	1420.4	1407.0	1406.3	1411.2	1509.5	1827.1	2386.7	2871.2	2900.2	2833.7
30°	1683.6	1672.9	1621.3	1565.4	1540.0	1598.7	1872.4	2487.8	3149.2	3200.9	3117.4
32.5°	2090.3	2074.7	1979.9	1846.2	1711.8	1742.3	1953.8	2603.1	3452.0	3545.4	3443.5
35°	2531.7	2527.5	2428.4	2229.6	1994.8	1946.7	2086.0	2754.5	3782.3	3930.9	3809.9
37.5°	2942.0	2939.9	2883.3	2649.1	2363.3	2231.8	2298.3	2952.6	4136.0	4351.1	4208.2
40°	3316.9	3323.2	3266.7	3057.3	2769.4	2597.5	2586.9	3197.3	4529.3	4808.7	4639.0
42.5°	3640.9	3647.9	3590.6	3435.7	3170.5	3002.1	2941.3	3497.3	4913.4	5300.4	5099.5
45°	3860.9	3904.7	3896.2	3772.4	3582.1	3407.4	3367.1	3873.6	5351.3	5821.7	5586.1
47.5°	3923.1	3963.4	4027.1	4044.1	3928.1	3756.2	3804.3	4327.0	5794.1	6343.7	6075.6
50°	3769.6	3807.1	3939.4	4115.5	4196.1	4143.1	4229.4	4813.0	6247.5	6864.4	6556.0
52.5°	3466.8	3505.0	3672.0	3950.7	4279.6	4446.6	4655.9	5291.9	6686.8	7357.4	7010.8
55°	3029.0	3069.3	3283.6	3599.1	4120.5	4571.8	5011.8	5770.1	7089.3	7800.9	7421.1
57.5°	2433.4	2463.1	2685.9	3127.3	3720.1	4447.3	5274.2	6292.1	7468.5	8236.7	7827.8
60°	1585.9	1612.1	1871.0	2363.3	3056.6	4031.3	5326.5	6874.3	7972.1	8803.3	8376.0
62.5°	1054.7	1072.4	1225.9	1587.3	2152.5	3232.7	5020.2	7339.0	8710.6	9789.4	9316.1
65°	723.6	741.3	894.8	1146.7	1390.7	2138.4	4139.6	7277.5	9379.8	10572.4	10012.9
67.5°	516.4	531.2	661.4	899.1	1006.6	1242.2	2806.2	6490.9	9283.6	10602.1	10050.4
70°	370.0	378.4	486.0	700.3	800.0	746.3	1560.5	4964.4	8128.4	9790.1	9285.0
72.5°	258.9	261.7	337.4	533.4	644.4	544.7	742.7	3309.8	6147.8	7684.2	7198.2
75°	175.4	179.0	227.1	391.2	517.1	415.9	393.3	1774.8	3609.0	4253.4	3812.8
77.5°	107.5	108.9	146.4	267.4	386.9	316.9	253.2	751.9	1396.4	1370.9	1168.6
80°	60.8	60.8	93.4	166.2	263.9	204.4	177.6	319.7	442.1	388.3	342.4
82.5°	34.0	34.7	67.9	103.3	174.7	121.0	97.6	147.8	191.0	169.1	147.1
85°	14.1	15.6	41.7	48.8	83.5	60.1	39.6	62.2	70.7	63.0	46.0
87.5°	1.4	2.1	12.7	9.2	9.9	12.0	5.7	12.0	9.9	9.9	7.1
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°	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7	1627.7
2.5°	1638.3	1627.7	1600.8	1569.7	1528.6	1508.8	1482.0	1463.6	1448.0	1449.4	1435.3
5°	1670.1	1643.2	1583.1	1508.1	1414.8	1348.3	1277.5	1228.7	1189.1	1180.6	1161.5
7.5°	1714.0	1671.5	1566.1	1431.0	1273.3	1153.7	1046.9	978.3	929.5	913.9	898.4
10°	1770.6	1709.0	1544.2	1334.1	1107.0	955.0	840.4	786.6	753.4	742.0	733.5
12.5°	1836.3	1752.2	1515.2	1216.0	935.9	789.4	716.6	689.7	679.1	675.5	673.4
15°	1919.1	1805.9	1471.3	1075.9	790.8	688.3	657.2	653.6	655.0	653.6	652.9
17.5°	2017.4	1864.6	1399.9	931.6	693.2	636.6	625.3	628.1	631.7	631.0	629.6
20°	2125.0	1922.6	1308.6	803.6	626.7	599.9	593.5	596.3	599.1	597.7	597.0
22.5°	2247.3	1984.9	1207.5	703.8	582.2	565.9	558.8	559.5	559.5	556.7	555.3
25°	2393.8	2053.5	1101.4	633.1	548.2	535.5	527.0	524.2	519.9	511.4	510.0
27.5°	2568.5	2126.4	999.5	583.6	521.3	509.3	499.4	492.3	481.7	467.6	466.2
30°	2765.1	2214.8	913.2	552.5	500.1	488.1	476.8	466.2	450.6	432.9	431.5
32.5°	2996.4	2309.6	850.3	531.9	481.0	468.3	454.8	442.1	425.1	407.4	408.2
35°	3272.3	2424.2	813.5	517.8	466.2	449.2	434.3	420.2	407.4	391.9	390.5
37.5°	3571.5	2545.8	802.2	510.7	456.3	430.1	413.1	403.2	401.8	392.6	391.9
40°	3899.1	2690.1	810.7	506.5	445.6	411.7	393.3	391.2	394.7	378.4	379.2
42.5°	4245.7	2861.3	824.8	501.5	430.8	393.3	375.6	375.6	372.8	350.2	350.2
45°	4620.6	3058.7	838.9	489.5	413.1	374.9	361.5	356.5	344.5	322.6	321.9
47.5°	4998.3	3259.6	849.6	467.6	391.9	359.3	347.3	336.0	318.3	298.5	297.8
50°	5357.0	3440.0	838.2	435.0	367.8	344.5	331.8	316.2	297.1	283.7	281.5
52.5°	5677.4	3596.3	790.1	396.8	342.4	328.9	317.6	301.3	285.8	271.6	270.2
55°	5956.1	3722.9	705.3	360.8	319.7	315.5	304.2	283.7	262.4	250.4	249.0
57.5°	6223.5	3819.1	599.1	331.1	299.2	300.6	283.7	265.3	245.5	232.7	231.3
60°	6579.3	3947.9	491.6	303.5	277.3	281.5	263.1	249.7	224.9	208.7	206.6
62.5°	7148.0	4148.0	390.5	269.5	251.8	253.2	245.5	229.2	199.5	180.4	179.0
65°	7599.3	4074.5	307.7	232.7	222.8	224.9	224.9	207.3	175.4	153.5	151.4
67.5°	7548.4	3488.8	245.5	196.7	195.2	196.7	201.6	186.7	155.6	137.9	135.1
70°	6953.5	2775.0	196.7	163.4	169.8	166.2	180.4	170.5	140.1	122.4	120.3
72.5°	5673.9	1999.0	150.0	135.1	130.2	135.8	162.7	153.5	116.7	96.9	94.8
75°	3315.5	1066.7	111.8	106.8	94.1	113.2	144.3	130.9	89.1	71.4	69.3
77.5°	1079.5	372.1	82.1	78.5	70.0	91.3	123.1	110.4	72.9	56.6	54.5
80°	289.3	112.5	55.9	51.6	45.3	67.9	97.6	87.7	52.3	36.8	36.1
82.5°	116.0	47.4	32.5	29.0	24.8	46.7	77.1	70.7	38.9	23.3	23.3
85°	37.5	15.6	12.0	9.2	11.3	29.0	46.0	48.1	27.6	12.0	9.2
87.5°	5.0	2.1	2.1	2.8	2.1	5.0	14.1	13.4	7.8	1.4	0.0
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)