

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: P883146

Luminaire Tested: **NAV-SB3B-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883146
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-SB3B-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA 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: 10407 lumens
Efficiency: N/A
Efficacy: 95.3 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

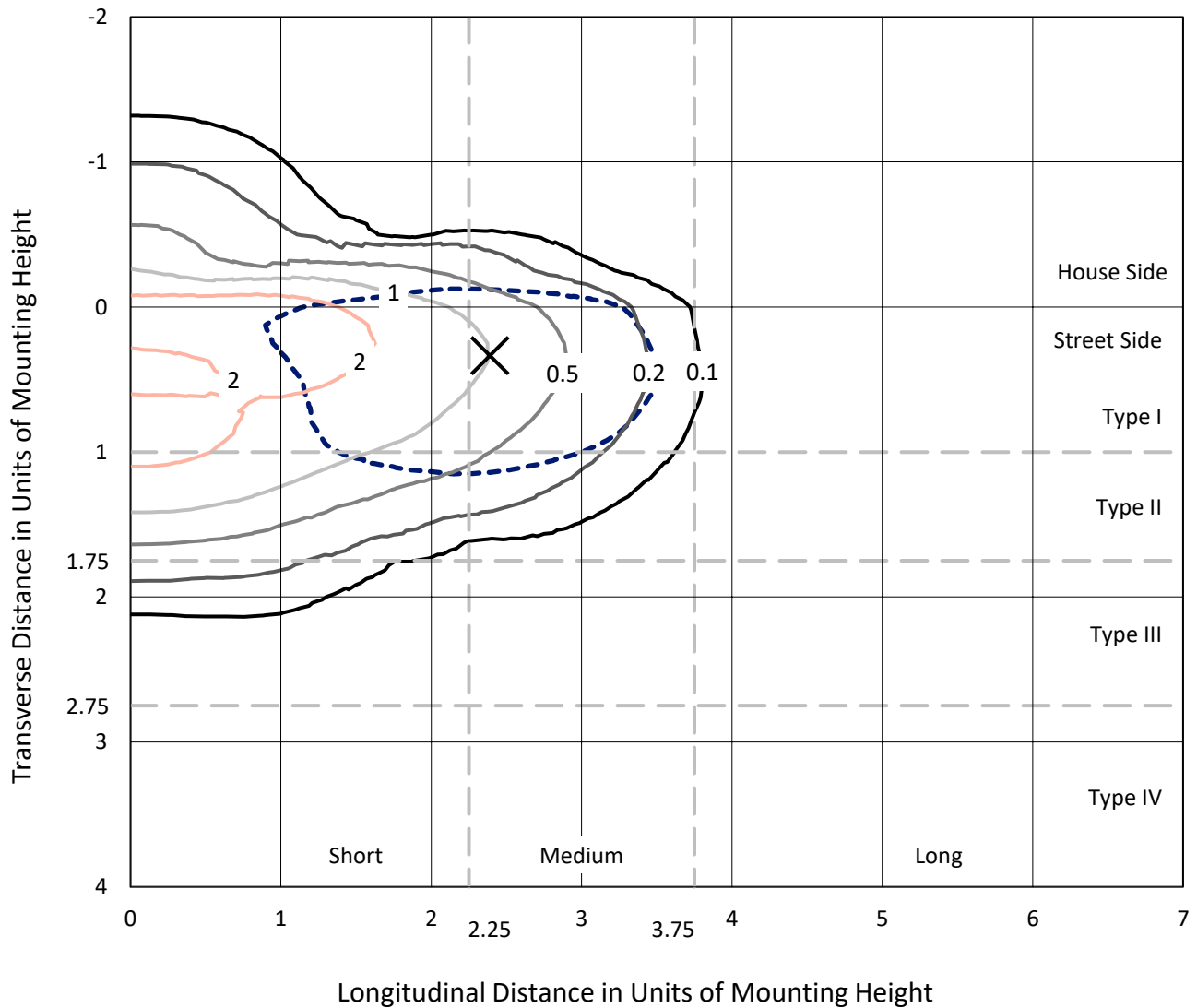
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

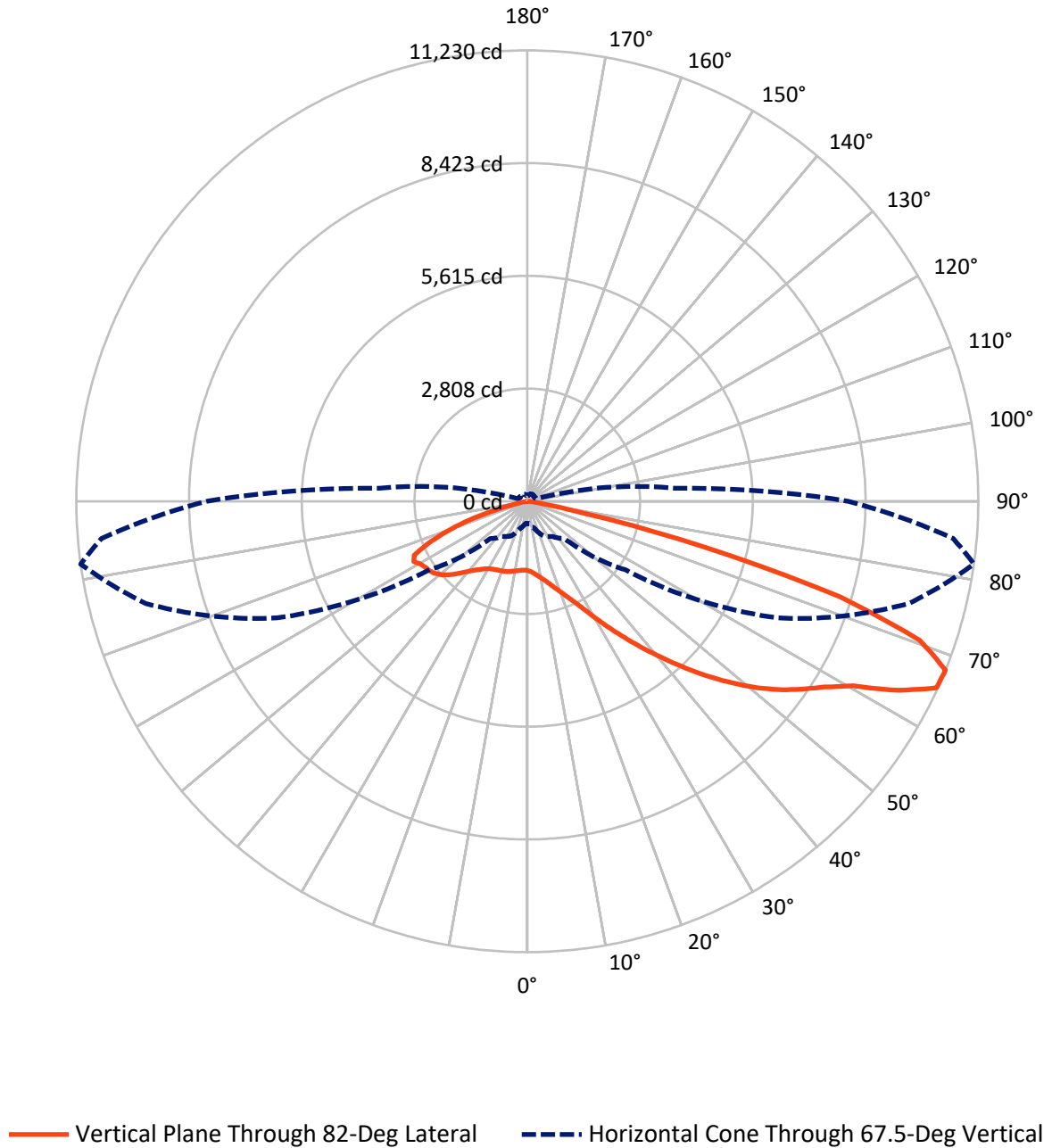
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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	1885.1	0.0	1885.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8521.9	0.0	8521.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	10407.0	0.0	10407.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	1.5
10°-20°	399.2	3.8
20°-30°	639.3	6.1
30°-40°	1130.5	10.9
40°-50°	1980.8	19.0
50°-60°	2641.8	25.4
60°-70°	2459.4	23.6
70°-80°	943.9	9.1
80°-90°	58.6	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°	10407.0	100.0
0°-180°	10407.0	100.0

Coefficient of Utilization



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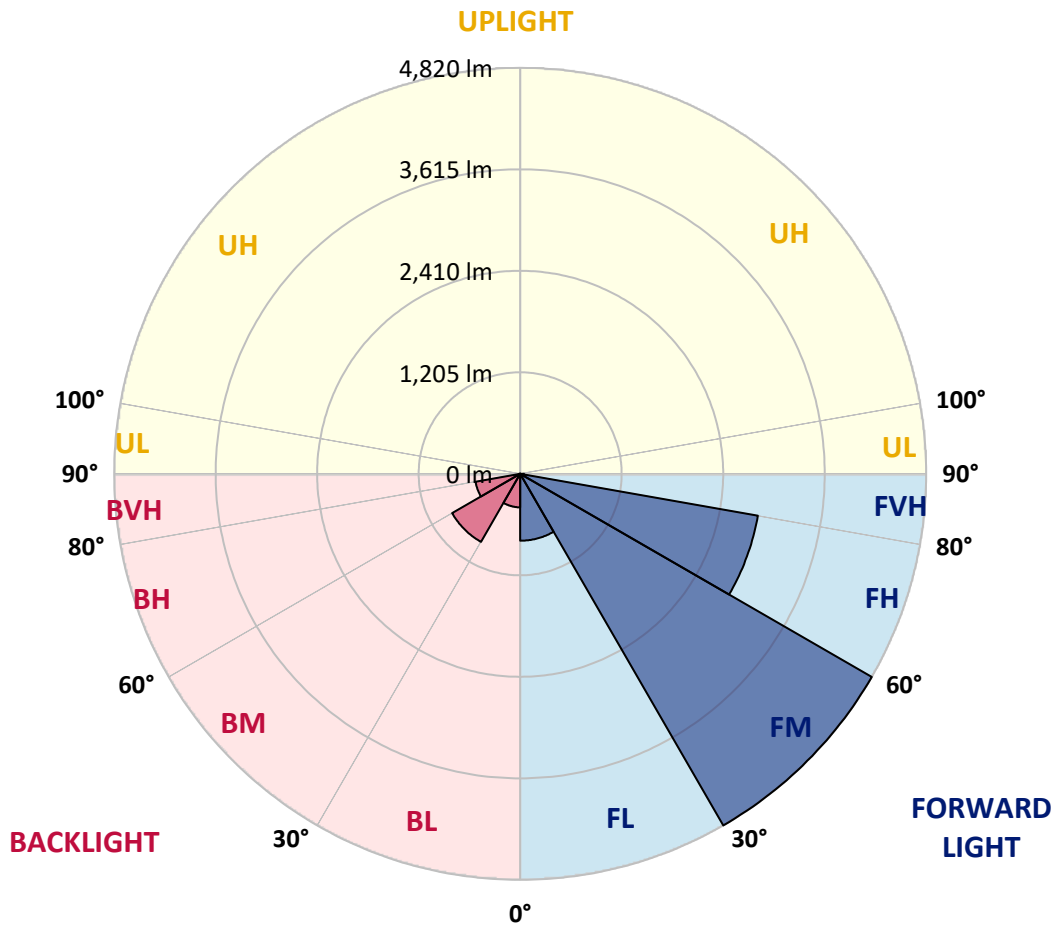
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	793.9	7.6			
FM (30°-60°)	4820.1	46.3			
FH (60°-80°)	2865.2	27.5			G2/5000
FVH (80°-90°)	42.6	0.4			G1/100
BL (0°-30°)	398.1	3.8	B1/500		
BM (30°-60°)	932.9	9.0	B1/1000		
BH (60°-80°)	538.1	5.2	B2/1000		G2/1000
BVH (80°-90°)	16.0	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°	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1
2.5°	1822.2	1832.7	1826.7	1823.7	1818.5	1811.0	1805.0	1786.3	1766.8	1754.1	1749.6
5°	1859.0	1869.4	1868.7	1871.7	1875.4	1877.7	1876.2	1855.2	1827.5	1805.8	1793.0
7.5°	1827.5	1839.5	1849.2	1864.2	1890.4	1918.2	1931.6	1927.1	1898.7	1868.7	1853.0
10°	1738.3	1751.1	1774.3	1809.5	1865.0	1924.9	1975.1	1998.3	1980.3	1947.4	1925.6
12.5°	1575.0	1587.7	1633.4	1709.9	1802.8	1906.9	2002.8	2065.0	2069.5	2036.5	2011.1
15°	1391.4	1404.1	1452.8	1548.8	1690.4	1857.5	2017.8	2135.4	2175.2	2146.7	2116.0
17.5°	1277.5	1288.8	1325.5	1402.6	1550.3	1758.6	2012.6	2210.4	2301.0	2278.6	2241.8
20°	1243.1	1252.8	1270.0	1324.0	1446.9	1655.9	1978.1	2280.8	2436.7	2423.9	2382.7
22.5°	1279.8	1288.8	1294.0	1318.0	1395.2	1588.5	1934.6	2352.7	2594.0	2595.5	2545.3
25°	1364.4	1373.4	1367.4	1382.4	1416.1	1567.5	1918.2	2437.4	2791.8	2808.3	2751.3
27.5°	1503.8	1504.5	1490.3	1489.6	1494.8	1599.0	1935.4	2528.1	3041.3	3072.0	3001.6
30°	1783.3	1772.0	1717.3	1658.2	1631.2	1693.4	1983.3	2635.2	3335.8	3390.5	3302.1
32.5°	2214.1	2197.6	2097.2	1955.6	1813.3	1845.5	2069.5	2757.3	3656.5	3755.4	3647.5
35°	2681.7	2677.2	2572.3	2361.7	2113.0	2062.0	2209.6	2917.7	4006.4	4163.7	4035.6
37.5°	3116.2	3114.0	3054.1	2806.0	2503.3	2364.0	2434.4	3127.5	4381.0	4608.8	4457.5
40°	3513.4	3520.1	3460.2	3238.4	2933.4	2751.3	2740.1	3386.7	4797.6	5093.6	4913.8
42.5°	3856.5	3864.0	3803.3	3639.2	3358.3	3179.9	3115.5	3704.4	5204.5	5614.3	5401.5
45°	4089.6	4136.0	4127.0	3995.9	3794.3	3609.3	3566.6	4103.0	5668.3	6166.6	5917.0
47.5°	4155.5	4198.2	4265.6	4283.6	4160.7	3978.7	4029.6	4583.3	6137.3	6719.5	6435.5
50°	3992.9	4032.6	4172.7	4359.3	4444.7	4388.5	4479.9	5098.1	6617.6	7271.0	6944.3
52.5°	3672.2	3712.7	3889.5	4184.7	4533.1	4710.0	4931.7	5605.3	7082.9	7793.2	7426.1
55°	3208.4	3251.1	3478.1	3812.3	4364.5	4842.6	5308.6	6111.9	7509.3	8263.0	7860.7
57.5°	2577.5	2609.0	2845.0	3312.6	3940.5	4710.7	5586.6	6664.8	7910.9	8724.6	8291.5
60°	1679.9	1707.6	1981.8	2503.3	3237.6	4270.1	5642.1	7281.5	8444.4	9324.8	8872.2
62.5°	1117.2	1135.9	1298.5	1681.4	2280.1	3424.2	5317.6	7773.8	9226.6	10369.3	9868.0
65°	766.5	785.2	947.8	1214.6	1473.1	2265.1	4384.8	7708.6	9935.4	11198.7	10606.0
67.5°	547.0	562.7	700.6	952.3	1066.2	1315.7	2972.4	6875.4	9833.5	11230.2	10645.7
70°	391.9	400.9	514.8	741.8	847.4	790.5	1652.9	5258.4	8609.9	10370.0	9835.0
72.5°	274.2	277.2	357.4	565.0	682.6	576.9	786.7	3505.9	6512.0	8139.4	7624.6
75°	185.8	189.6	240.5	414.4	547.7	440.6	416.6	1879.9	3822.8	4505.4	4038.6
77.5°	113.9	115.4	155.1	283.2	409.9	335.7	268.2	796.5	1479.1	1452.1	1237.8
80°	64.4	64.4	98.9	176.1	279.5	216.5	188.1	338.7	468.3	411.4	362.7
82.5°	36.0	36.7	71.9	109.4	185.1	128.1	103.4	156.6	202.3	179.1	155.8
85°	15.0	16.5	44.2	51.7	88.4	63.7	42.0	65.9	74.9	66.7	48.7
87.5°	1.5	2.2	13.5	9.7	10.5	12.7	6.0	12.7	10.5	10.5	7.5
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°	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1	1724.1
2.5°	1735.3	1724.1	1695.6	1662.6	1619.2	1598.2	1569.7	1550.3	1533.8	1535.3	1520.3
5°	1769.0	1740.6	1676.9	1597.5	1498.6	1428.1	1353.2	1301.5	1259.5	1250.5	1230.3
7.5°	1815.5	1770.5	1658.9	1515.8	1348.7	1222.1	1108.9	1036.3	984.6	968.1	951.6
10°	1875.4	1810.3	1635.7	1413.1	1172.6	1011.5	890.1	833.2	798.0	786.0	777.0
12.5°	1945.1	1856.0	1605.0	1288.0	991.3	836.2	759.0	730.5	719.3	715.6	713.3
15°	2032.8	1912.9	1558.5	1139.7	837.7	729.0	696.1	692.3	693.8	692.3	691.6
17.5°	2136.9	1975.1	1482.8	986.8	734.3	674.3	662.4	665.4	669.1	668.4	666.9
20°	2250.8	2036.5	1386.2	851.2	663.9	635.4	628.6	631.6	634.6	633.1	632.4
22.5°	2380.5	2102.5	1279.0	745.5	616.7	599.4	591.9	592.7	592.7	589.7	588.2
25°	2535.6	2175.2	1166.6	670.6	580.7	567.2	558.2	555.2	550.7	541.7	540.2
27.5°	2720.6	2252.3	1058.7	618.2	552.2	539.5	529.0	521.5	510.3	495.3	493.8
30°	2928.9	2346.0	967.3	585.2	529.7	517.0	505.0	493.8	477.3	458.6	457.1
32.5°	3173.9	2446.4	900.6	563.5	509.5	496.0	481.8	468.3	450.3	431.6	432.3
35°	3466.2	2567.8	861.7	548.5	493.8	475.8	460.1	445.1	431.6	415.1	413.6
37.5°	3783.1	2696.7	849.7	541.0	483.3	455.6	437.6	427.1	425.6	415.8	415.1
40°	4130.0	2849.5	858.7	536.5	472.0	436.1	416.6	414.4	418.1	400.9	401.6
42.5°	4497.2	3030.8	873.7	531.2	456.3	416.6	397.9	397.9	394.9	370.9	370.9
45°	4894.3	3239.9	888.6	518.5	437.6	397.1	382.9	377.6	364.9	341.7	340.9
47.5°	5294.4	3452.7	899.9	495.3	415.1	380.6	367.9	355.9	337.2	316.2	315.4
50°	5674.3	3643.7	887.9	460.8	389.6	364.9	351.4	334.9	314.7	300.5	298.2
52.5°	6013.7	3809.3	836.9	420.3	362.7	348.4	336.4	319.2	302.7	287.7	286.2
55°	6308.9	3943.4	747.0	382.1	338.7	334.2	322.2	300.5	278.0	265.2	263.7
57.5°	6592.1	4045.3	634.6	350.7	316.9	318.4	300.5	281.0	260.0	246.5	245.0
60°	6969.0	4181.7	520.7	321.4	293.7	298.2	278.7	264.5	238.3	221.0	218.8
62.5°	7571.4	4393.8	413.6	285.5	266.7	268.2	260.0	242.8	211.3	191.1	189.6
65°	8049.5	4315.8	325.9	246.5	236.0	238.3	238.3	219.5	185.8	162.6	160.3
67.5°	7995.5	3695.4	260.0	208.3	206.8	208.3	213.5	197.8	164.8	146.1	143.1
70°	7365.4	2939.4	208.3	173.1	179.8	176.1	191.1	180.6	148.4	129.6	127.4
72.5°	6010.0	2117.5	158.8	143.1	137.9	143.9	172.3	162.6	123.6	102.7	100.4
75°	3511.9	1129.9	118.4	113.1	99.7	119.9	152.9	138.6	94.4	75.7	73.4
77.5°	1143.4	394.1	86.9	83.2	74.2	96.7	130.4	116.9	77.2	59.9	57.7
80°	306.5	119.1	59.2	54.7	48.0	71.9	103.4	92.9	55.4	39.0	38.2
82.5°	122.9	50.2	34.5	30.7	26.2	49.5	81.7	74.9	41.2	24.7	24.7
85°	39.7	16.5	12.7	9.7	12.0	30.7	48.7	51.0	29.2	12.7	9.7
87.5°	5.2	2.2	2.2	3.0	2.2	5.2	15.0	14.2	8.2	1.5	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)