

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: P882580

Luminaire Tested: **NAV-SB2C-735-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882580
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11557 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

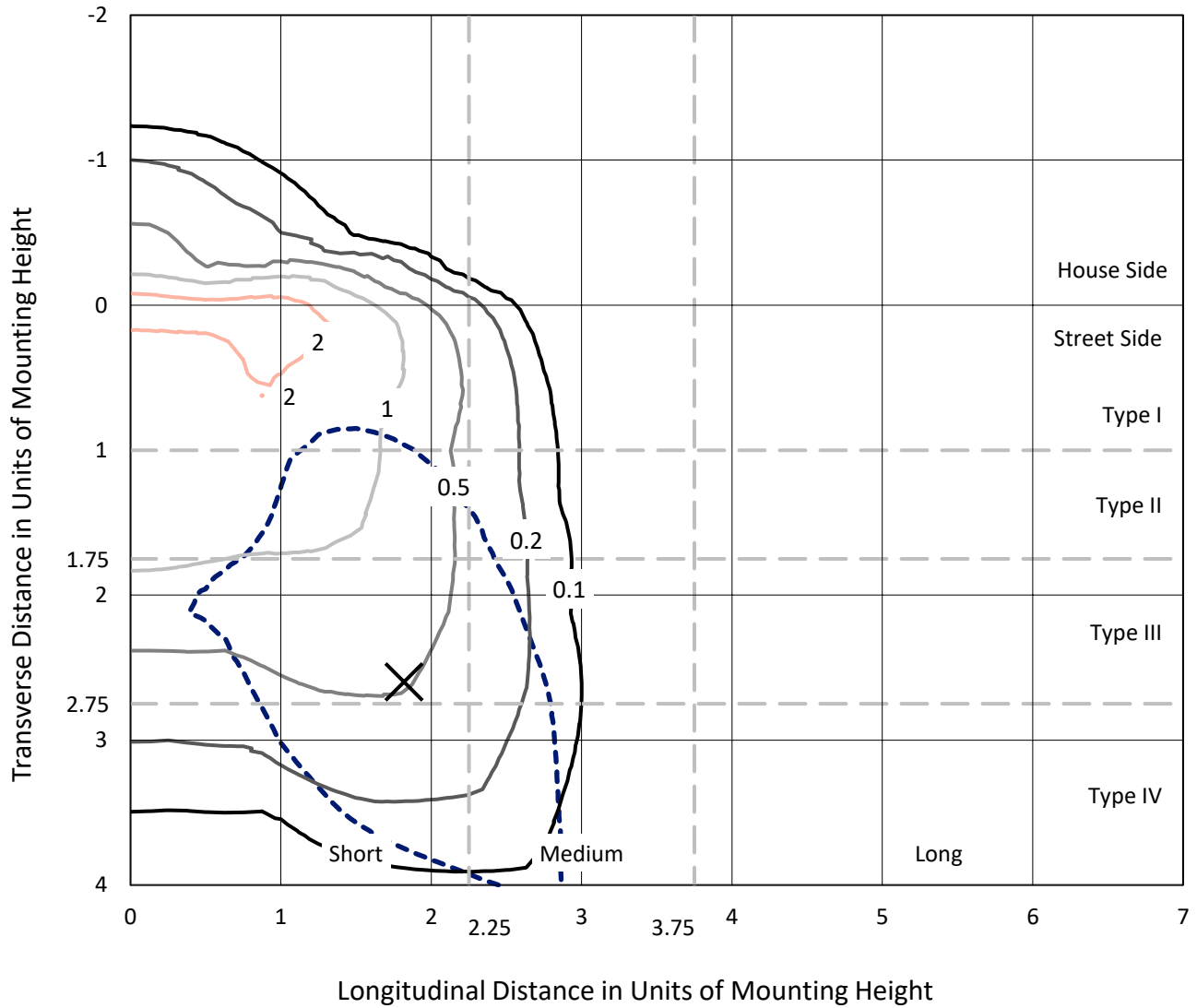
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882580
 CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

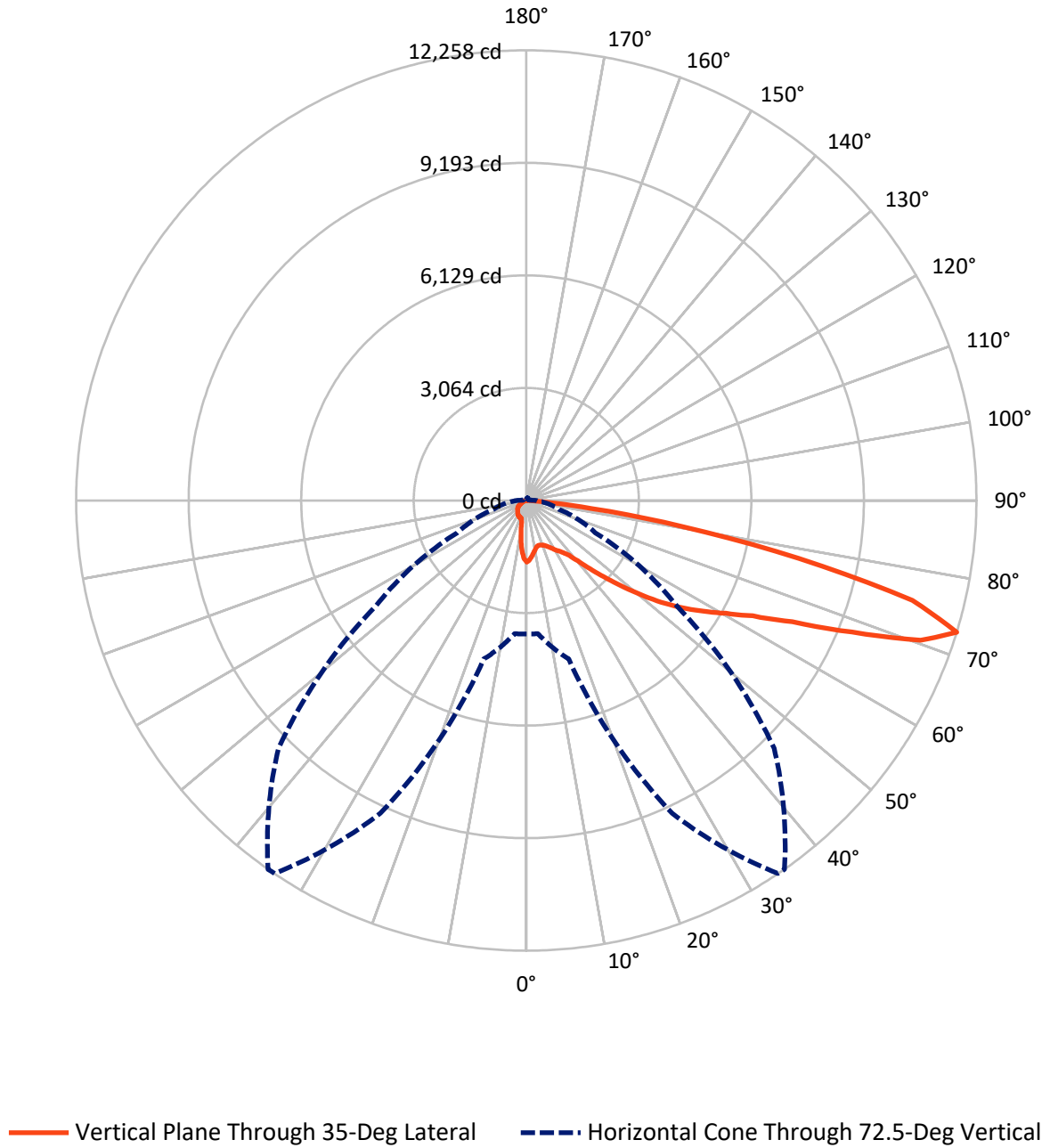
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P882580
CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P882580
 CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1300.7	0.0	1300.7
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	10256.3	0.0	10256.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	11557.0	0.0	11557.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	1.2
10°-20°	322.0	2.8
20°-30°	523.1	4.5
30°-40°	872.7	7.6
40°-50°	1651.2	14.3
50°-60°	2623.8	22.7
60°-70°	3245.8	28.1
70°-80°	2017.6	17.5
80°-90°	163.1	1.4
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°	11557.0	100.0
0°-180°	11557.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882580

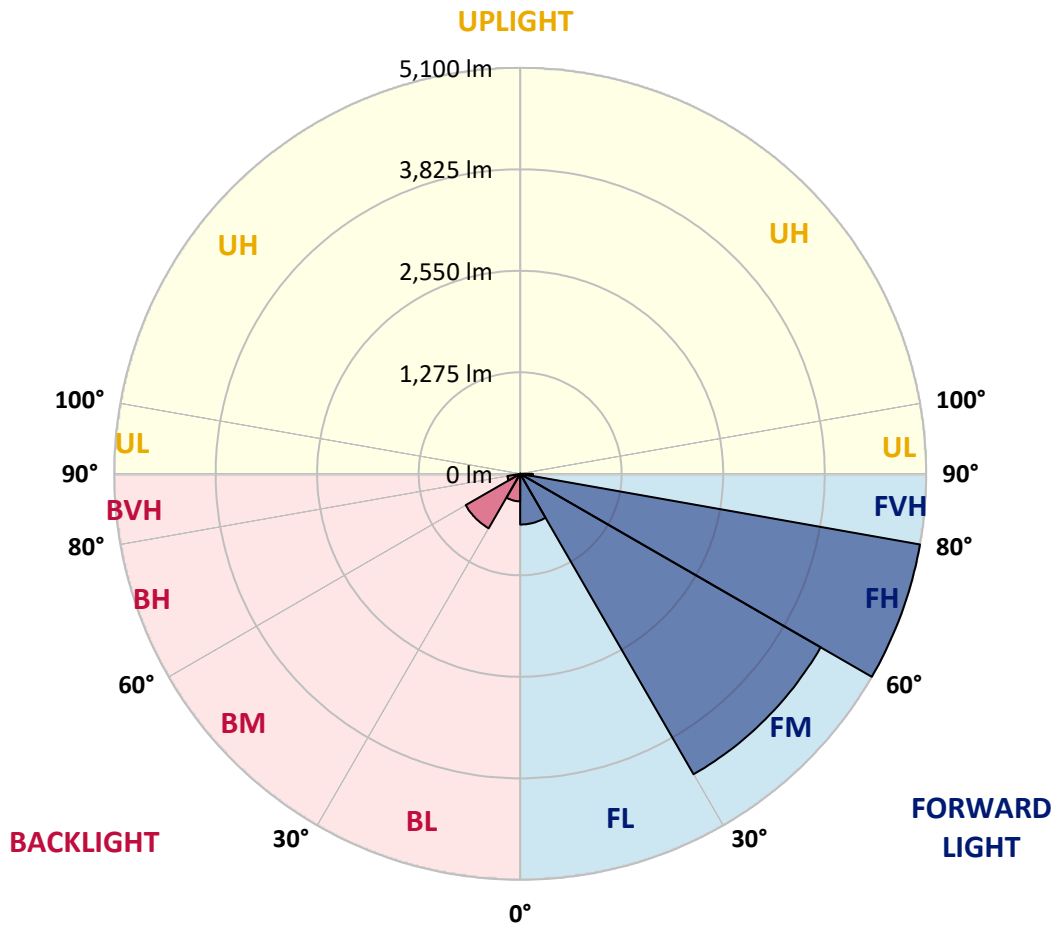
CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	637.1	5.5			
FM (30°-60°)	4358.1	37.7			
FH (60°-80°)	5100.2	44.1			G3/7500
FVH (80°-90°)	160.8	1.4			G2/225
BL (0°-30°)	345.6	3.0	B1/500		
BM (30°-60°)	789.6	6.8	B1/1000		
BH (60°-80°)	163.2	1.4	B1/500		G1/500
BVH (80°-90°)	2.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



REPORT NUMBER: P882580

CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0
2.5°	1600.5	1614.0	1616.6	1620.8	1620.8	1625.9	1634.3	1646.2	1665.7	1675.8	1682.6
5°	1475.1	1485.3	1498.0	1508.2	1527.7	1530.2	1563.2	1595.4	1640.3	1674.1	1697.9
7.5°	1349.0	1360.8	1377.8	1402.3	1427.7	1435.3	1485.3	1539.5	1610.6	1674.1	1714.0
10°	1260.1	1260.9	1276.1	1300.7	1341.4	1350.7	1411.6	1488.7	1577.6	1664.0	1729.2
12.5°	1210.1	1216.0	1222.8	1241.4	1280.4	1286.3	1351.5	1442.1	1544.6	1658.1	1747.0
15°	1210.1	1214.3	1218.6	1227.9	1259.2	1264.3	1321.9	1412.5	1527.7	1660.6	1775.8
17.5°	1222.8	1229.6	1226.2	1237.2	1270.2	1273.6	1324.4	1404.0	1526.8	1676.7	1819.8
20°	1253.3	1258.4	1251.6	1258.4	1291.4	1298.2	1350.7	1420.1	1541.2	1704.6	1874.8
22.5°	1301.6	1304.1	1288.0	1293.1	1327.0	1335.4	1396.4	1465.8	1575.9	1749.5	1948.5
25°	1362.5	1367.6	1343.0	1349.0	1381.2	1391.3	1461.6	1534.4	1631.0	1811.3	2042.5
27.5°	1432.8	1435.3	1414.2	1413.3	1454.8	1469.2	1540.4	1619.1	1704.6	1889.2	2161.1
30°	1513.3	1520.9	1500.6	1497.2	1549.7	1561.5	1631.8	1723.3	1813.0	2006.1	2329.6
32.5°	1576.8	1582.7	1570.8	1579.3	1632.7	1642.0	1742.7	1870.6	1983.2	2172.1	2559.1
35°	1668.2	1671.6	1644.5	1659.8	1720.7	1744.4	1894.3	2077.2	2197.5	2380.4	2858.8
37.5°	1999.3	1999.3	1884.2	1808.8	1867.2	1888.4	2101.8	2337.2	2461.7	2659.8	3236.5
40°	2457.5	2449.8	2281.3	2127.2	2119.6	2161.1	2397.3	2664.9	2803.0	2995.2	3661.6
42.5°	2946.1	2934.2	2704.7	2552.3	2526.9	2541.3	2738.6	3068.9	3209.4	3404.2	4118.9
45°	3379.6	3376.2	3166.2	2961.3	2915.6	2961.3	3164.5	3541.4	3642.1	3847.1	4575.3
47.5°	3742.9	3742.9	3589.6	3455.8	3432.1	3459.2	3741.2	4065.6	4056.2	4318.7	5019.9
50°	4161.2	4157.9	4012.2	3954.6	3979.2	4017.3	4405.1	4617.7	4484.7	4782.0	5417.1
52.5°	4454.2	4474.6	4424.6	4415.3	4540.6	4606.7	5079.2	5157.9	4868.3	5221.5	5714.3
55°	4686.3	4710.0	4767.6	4832.8	5074.1	5160.5	5732.1	5670.3	5189.3	5602.5	5885.4
57.5°	5014.8	4981.0	5069.9	5198.6	5589.0	5693.1	6364.6	6153.8	5447.6	5911.6	5904.0
60°	5413.7	5418.8	5434.0	5596.6	6103.0	6236.8	6987.9	6611.1	5613.5	6101.3	5697.4
62.5°	5893.0	5900.6	5931.9	6181.7	6793.1	6919.3	7651.8	6985.4	5689.7	6047.9	5163.9
65°	5859.9	5892.1	6241.9	7096.3	7842.3	7966.8	8426.6	7247.9	5574.6	5560.2	4204.4
67.5°	5338.3	5390.8	5976.0	8188.7	9424.2	9563.1	9363.2	7299.5	5077.5	4323.8	2742.8
70°	4654.1	4672.7	5376.4	9171.0	11255.8	11396.4	10201.6	6731.3	3853.0	2411.7	1228.7
72.5°	3634.5	3638.8	4464.4	9398.8	12250.0	12257.6	9543.6	4997.0	2072.2	926.4	426.8
75°	2596.3	2570.9	2990.1	7622.2	10777.4	10863.8	7154.7	2344.0	791.8	437.8	212.6
77.5°	1392.2	1420.1	1691.9	4520.3	7445.2	7592.5	3903.8	675.8	403.1	298.1	140.6
80°	430.2	453.9	693.5	2069.6	4217.1	4306.0	1447.2	300.6	281.1	212.6	92.3
82.5°	135.5	140.6	323.5	869.7	1750.4	1791.0	419.2	170.2	192.2	140.6	54.2
85°	39.0	39.8	144.0	324.3	432.7	441.2	117.7	66.1	110.1	87.2	27.9
87.5°	4.2	13.5	54.2	54.2	38.1	37.3	12.7	14.4	31.3	11.0	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P882580
 CATALOG NUMBER: NAV-SB2C-735-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0
2.5°	1678.4	1679.2	1668.2	1649.6	1629.3	1612.3	1591.2	1574.2	1562.4	1559.0	1564.9
5°	1690.2	1684.3	1653.0	1596.2	1528.5	1470.1	1404.9	1353.2	1319.3	1304.9	1310.0
7.5°	1708.0	1691.1	1622.5	1510.7	1381.2	1266.0	1149.1	1058.5	1000.9	972.1	976.4
10°	1723.3	1689.4	1571.7	1387.1	1188.9	1014.5	857.0	747.7	686.8	658.0	658.8
12.5°	1737.7	1688.5	1505.6	1240.6	972.1	758.7	612.2	558.0	541.1	535.2	533.5
15°	1764.8	1691.1	1422.6	1072.9	756.2	573.3	519.9	519.1	522.5	520.8	519.9
17.5°	1802.0	1693.6	1328.7	895.1	583.5	505.5	503.0	510.6	515.7	513.2	512.3
20°	1850.3	1703.8	1228.7	718.9	501.3	488.6	494.5	501.3	505.5	501.3	500.5
22.5°	1918.0	1721.6	1119.5	577.5	475.1	478.4	483.5	491.2	495.4	489.5	488.6
25°	2001.0	1749.5	1011.9	502.2	462.4	466.6	474.2	482.7	487.8	481.8	481.0
27.5°	2108.6	1794.4	912.9	485.2	449.7	452.2	463.2	475.9	482.7	475.1	475.1
30°	2264.4	1868.1	827.3	492.8	442.0	436.1	451.4	469.1	476.8	470.0	469.1
32.5°	2471.0	1972.2	774.8	504.7	438.6	417.5	431.9	454.7	467.4	463.2	463.2
35°	2742.0	2130.6	754.5	518.2	436.1	398.0	408.2	432.7	454.7	459.0	459.0
37.5°	3070.5	2350.8	760.4	524.2	428.5	381.9	387.0	408.2	437.0	450.5	453.9
40°	3444.0	2607.3	794.3	518.2	420.0	368.4	369.2	385.3	410.7	431.0	437.8
42.5°	3829.3	2907.1	857.0	496.2	412.4	356.5	354.0	365.0	381.9	396.3	402.2
45°	4196.0	3215.4	918.8	465.7	403.1	344.7	338.7	343.0	346.3	352.3	355.7
47.5°	4516.1	3432.1	901.0	437.8	390.4	331.1	320.9	319.2	309.1	308.2	307.4
50°	4737.1	3479.6	800.2	409.9	371.8	315.9	299.8	289.6	271.8	263.4	264.2
52.5°	4807.4	3292.4	653.7	381.9	341.3	295.5	272.7	256.6	234.6	226.9	226.1
55°	4714.2	2925.7	522.5	348.0	298.9	268.4	243.0	221.9	204.1	194.8	194.8
57.5°	4486.4	2459.1	413.2	308.2	254.0	238.0	212.6	191.4	176.1	166.8	165.1
60°	4108.7	1952.8	326.9	260.8	216.8	204.9	178.7	165.1	151.6	140.6	138.0
62.5°	3535.4	1393.9	256.6	206.6	181.2	167.7	152.4	142.3	126.2	110.9	108.4
65°	2758.9	852.7	198.2	151.6	145.7	138.9	129.6	120.2	100.8	85.5	83.0
67.5°	1740.2	403.9	141.4	114.3	115.2	111.8	107.5	99.9	85.5	72.0	70.3
70°	766.4	195.6	93.1	87.2	85.5	85.5	88.9	86.4	72.8	60.1	57.6
72.5°	260.8	105.0	69.4	66.1	61.8	61.0	74.5	72.0	58.4	46.6	44.0
75°	136.3	70.3	50.8	47.4	37.3	44.9	59.3	55.9	41.5	30.5	27.9
77.5°	88.9	50.0	34.7	30.5	21.2	29.6	44.0	39.0	24.6	15.2	13.5
80°	55.9	33.0	20.3	14.4	10.2	16.1	23.7	16.9	9.3	3.4	2.5
82.5°	29.6	16.9	7.6	5.1	4.2	5.1	5.9	4.2	1.7	0.0	0.0
85°	11.9	5.9	2.5	1.7	0.8	0.0	1.7	0.8	0.0	0.0	0.0
87.5°	4.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)