

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: P960931

Luminaire Tested: **NAV-SB1D-750-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960931
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-750-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8889.8 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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



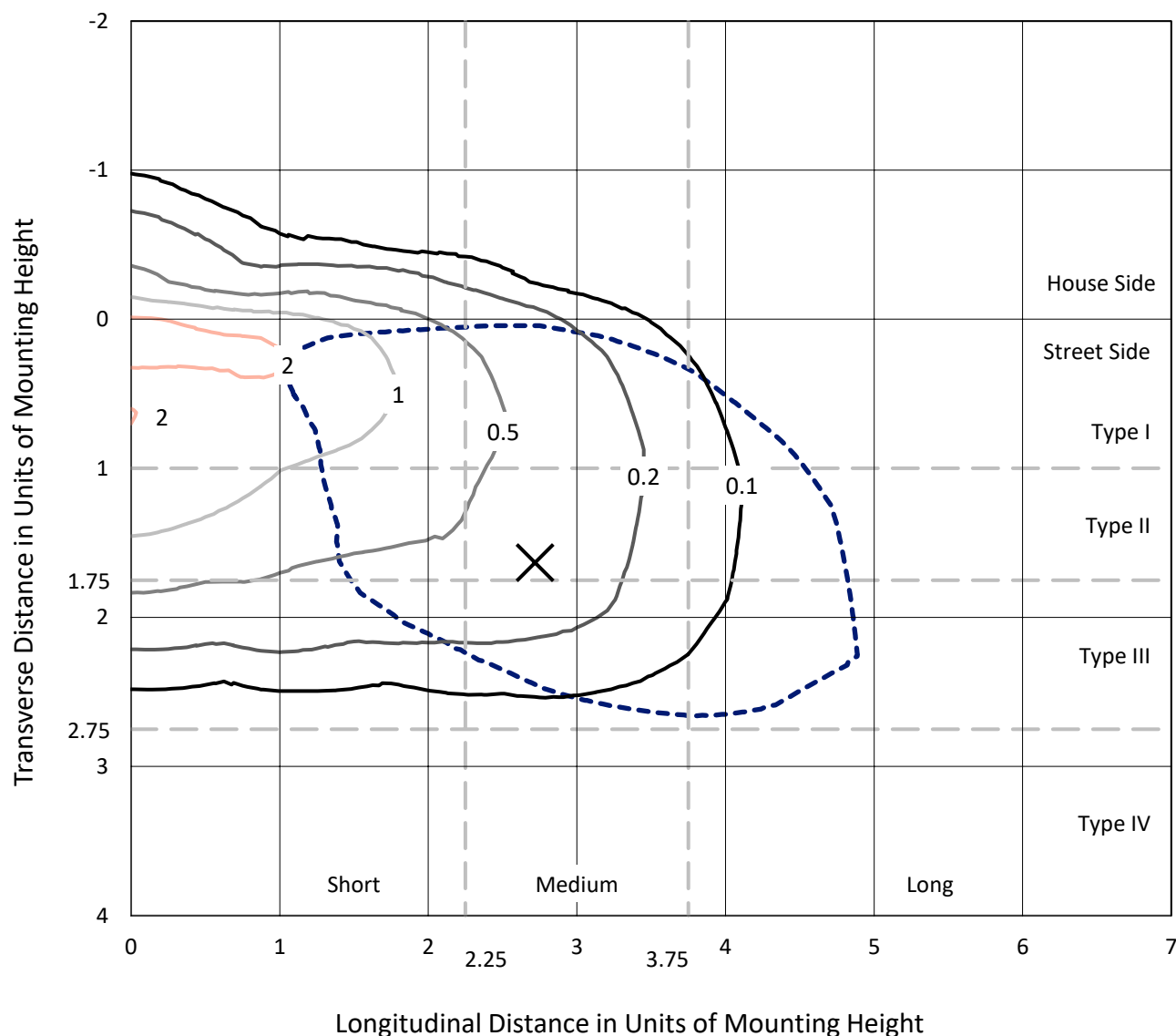
REPORT NUMBER: P960931

CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

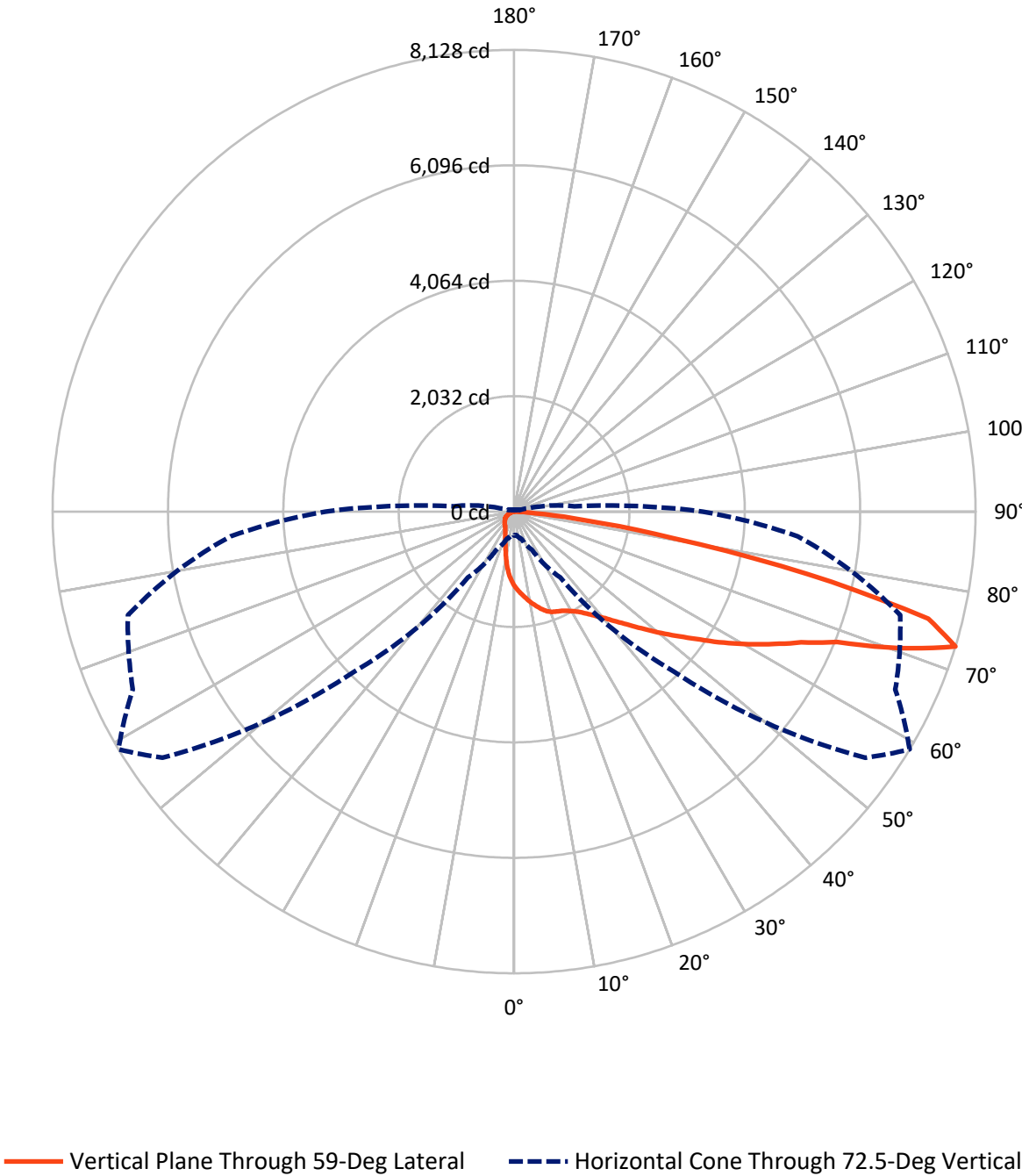
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type III - Medium - N/A

REPORT NUMBER: P960931
CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P960931

CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	938.9	0.0	938.9
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7950.9	0.0	7950.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	8889.8	0.0	8889.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.9	1.3
10°-20°	315.9	3.6
20°-30°	500.7	5.6
30°-40°	803.5	9.0
40°-50°	1283.3	14.4
50°-60°	1858.1	20.9
60°-70°	2205.1	24.8
70°-80°	1637.0	18.4
80°-90°	167.4	1.9
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°	8889.8	100.0
0°-180°	8889.8	100.0

Coefficient of Utilization



REPORT NUMBER: P960931

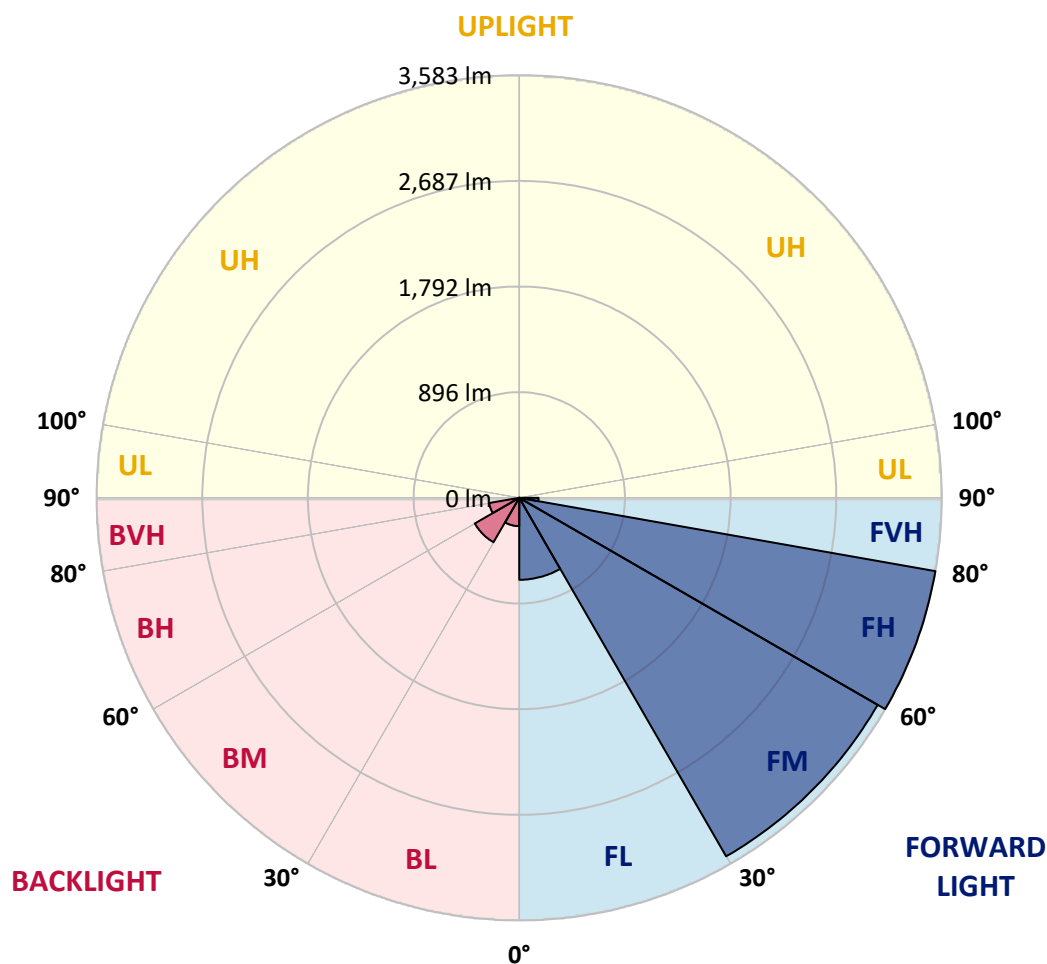
CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	695.0	7.8			
FM	(30°-60°)	3509.6	39.5			
FH	(60°-80°)	3583.1	40.3			G2/5000
FVH	(80°-90°)	163.2	1.8			G2/225
BL	(0°-30°)	240.5	2.7	B1/500		
BM	(30°-60°)	435.3	4.9	B1/1000		
BH	(60°-80°)	258.9	2.9	B1/500		G1/500
BVH	(80°-90°)	4.2	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-G2

Type III Medium



REPORT NUMBER: P960931

CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6
2.5°	1458.6	1450.4	1451.6	1437.7	1427.7	1417.4	1397.0	1394.1	1379.5	1354.0	1328.0
5°	1585.7	1580.4	1575.7	1560.0	1539.8	1514.2	1480.0	1467.8	1441.1	1397.0	1345.9
7.5°	1678.5	1672.1	1674.4	1658.8	1642.6	1614.1	1567.0	1544.5	1509.0	1441.7	1364.5
10°	1696.5	1693.0	1708.1	1713.9	1713.9	1695.9	1650.0	1627.4	1575.7	1489.8	1383.6
12.5°	1595.5	1596.1	1633.8	1679.1	1738.3	1755.1	1724.4	1700.0	1648.9	1541.0	1408.0
15°	1477.6	1478.3	1514.8	1572.9	1669.8	1766.7	1791.1	1775.4	1722.6	1596.1	1436.4
17.5°	1406.9	1403.9	1428.3	1475.9	1577.5	1713.9	1831.7	1842.1	1799.2	1657.0	1467.8
20°	1397.0	1391.7	1404.6	1428.3	1500.9	1647.8	1836.4	1885.7	1878.1	1726.1	1503.8
22.5°	1457.3	1449.2	1442.3	1443.4	1474.2	1592.6	1824.8	1910.1	1959.4	1809.1	1553.2
25°	1577.0	1564.1	1541.5	1512.5	1506.1	1581.0	1816.6	1936.7	2034.8	1915.3	1618.2
27.5°	1723.2	1705.2	1661.6	1618.2	1581.0	1613.5	1833.4	1979.2	2120.2	2038.9	1693.6
30°	1884.0	1861.9	1818.4	1735.9	1676.8	1686.0	1873.5	2034.8	2229.3	2178.8	1788.2
32.5°	2120.2	2069.1	1993.1	1867.1	1788.7	1764.4	1933.9	2105.7	2364.6	2365.1	1925.2
35°	2322.8	2294.3	2217.7	2061.0	1900.2	1868.3	2013.4	2205.5	2552.0	2611.8	2116.7
37.5°	2455.7	2416.7	2349.4	2231.6	2073.2	1975.1	2119.6	2328.0	2750.5	2892.7	2352.9
40°	2604.2	2565.9	2476.5	2365.7	2274.0	2158.4	2253.7	2469.0	2968.1	3181.2	2622.8
42.5°	2783.6	2733.7	2628.0	2508.5	2412.7	2399.9	2428.9	2644.8	3191.5	3494.5	2903.7
45°	2994.2	2947.3	2825.9	2675.0	2590.9	2568.2	2649.5	2849.7	3440.6	3838.1	3187.5
47.5°	3191.5	3137.0	3006.4	2868.9	2775.5	2704.1	2883.9	3091.8	3722.7	4197.4	3455.7
50°	3359.3	3303.6	3184.1	3037.2	2973.9	2880.5	3114.4	3361.7	4002.4	4562.5	3700.6
52.5°	3474.2	3424.9	3284.4	3184.7	3141.6	3094.7	3384.2	3647.8	4281.0	4896.8	3942.7
55°	3448.1	3404.0	3280.4	3273.4	3270.6	3319.9	3707.0	3972.2	4564.8	5213.2	4183.4
57.5°	3365.2	3315.3	3160.8	3267.1	3369.8	3520.7	4056.3	4355.8	4875.9	5511.4	4415.6
60°	3120.8	3103.4	3009.3	3254.9	3411.5	3717.5	4455.7	4741.2	5212.5	5773.7	4621.7
62.5°	2603.6	2618.8	2618.2	3280.4	3487.0	3941.4	4818.4	5131.3	5541.6	6026.3	4805.1
65°	1949.5	2001.8	2068.6	3050.5	3588.0	4341.4	5252.0	5554.4	5875.9	6319.9	4991.4
67.5°	1309.9	1351.8	1397.0	2502.6	3287.4	4761.5	5972.3	6134.2	6276.4	6645.5	5201.0
70°	749.9	763.2	826.5	1563.0	2534.0	4645.5	7145.3	7203.9	6873.6	7046.6	5353.6
72.5°	420.2	415.5	499.2	741.8	1416.1	3978.0	7556.2	8127.8	7408.2	7040.2	5012.9
75°	281.0	281.5	343.6	467.8	552.0	2784.7	6511.4	7536.4	7087.8	6242.8	4095.8
77.5°	191.6	197.9	252.5	361.6	255.3	1358.7	4307.7	5279.3	5738.4	4820.8	2827.7
80°	83.0	83.5	166.6	259.4	172.4	432.3	2233.4	2828.3	3599.0	2706.9	1120.1
82.5°	42.9	48.8	106.2	167.7	108.5	151.5	1055.1	1235.6	1510.2	794.6	229.8
85°	15.1	18.0	65.6	82.4	54.5	54.0	367.4	374.3	319.8	119.5	63.2
87.5°	0.0	2.9	25.5	20.3	7.0	6.4	43.6	36.6	29.0	16.8	20.9
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: P960931

CATALOG NUMBER: NAV-SB1D-750-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6
2.5°	1315.8	1300.1	1274.6	1243.2	1206.6	1186.9	1158.5	1141.0	1125.3	1126.0	1138.8
5°	1317.5	1291.4	1226.4	1157.3	1080.7	1024.4	961.8	917.6	884.0	875.9	888.0
7.5°	1322.8	1278.6	1172.4	1057.5	929.8	835.2	748.7	694.1	663.4	655.3	663.4
10°	1329.7	1264.6	1111.4	935.6	777.2	663.4	591.4	556.6	542.6	532.2	538.6
12.5°	1335.5	1250.2	1034.8	809.6	641.3	552.6	497.9	468.9	456.7	449.3	453.3
15°	1345.3	1231.0	951.8	692.4	549.6	477.0	425.5	404.0	400.5	401.6	403.3
17.5°	1355.3	1212.5	859.0	600.8	482.3	410.9	379.6	376.1	380.8	385.4	387.1
20°	1366.2	1185.7	765.0	531.7	420.2	365.1	356.9	359.3	361.6	369.7	372.1
22.5°	1382.5	1152.1	682.5	473.0	368.6	343.0	339.0	340.7	342.5	350.5	352.9
25°	1405.7	1116.1	615.8	419.0	336.1	325.0	320.9	320.9	323.3	330.9	333.7
27.5°	1430.1	1065.0	561.8	369.1	316.9	305.2	298.3	298.3	301.2	310.0	313.4
30°	1457.3	1018.5	519.5	332.0	300.6	285.6	276.2	274.0	277.5	288.4	291.4
32.5°	1506.7	988.4	489.2	314.6	286.2	267.5	254.8	248.5	251.8	264.7	268.1
35°	1581.6	981.4	468.4	305.9	272.2	251.3	233.3	223.4	226.3	239.7	243.7
37.5°	1669.2	996.0	448.0	294.3	258.8	235.6	211.9	199.1	203.7	215.9	219.4
40°	1795.2	1056.4	432.3	285.6	245.5	217.1	190.3	177.6	185.1	195.6	197.3
42.5°	1947.2	1163.7	428.3	277.5	229.3	197.3	170.7	161.3	167.2	177.0	178.8
45°	2135.9	1300.6	446.9	267.0	211.3	178.1	155.0	149.8	151.5	161.3	165.9
47.5°	2338.4	1441.1	497.9	257.7	195.6	162.5	142.8	138.2	136.9	146.3	152.1
50°	2543.3	1565.9	558.3	250.7	184.6	149.8	133.5	127.7	124.7	130.6	132.9
52.5°	2745.9	1665.1	597.8	239.1	173.5	136.9	125.4	116.6	111.4	114.3	116.6
55°	2951.3	1752.2	600.1	221.7	163.1	128.8	117.3	107.4	101.0	101.0	102.2
57.5°	3143.4	1828.8	565.9	198.5	148.6	121.3	106.2	98.1	91.1	88.8	89.4
60°	3313.5	1885.7	509.0	172.4	135.8	111.4	95.2	88.8	80.1	75.4	74.3
62.5°	3464.9	1913.6	431.2	145.7	120.1	99.8	84.8	77.8	66.2	60.4	59.8
65°	3593.2	1885.1	349.9	120.7	106.8	87.0	72.6	65.6	52.8	45.8	45.8
67.5°	3720.3	1755.1	264.7	101.6	92.9	73.1	59.8	53.4	44.1	38.3	38.3
70°	3736.5	1481.7	185.1	85.3	77.2	56.3	48.2	44.1	36.0	30.7	30.1
72.5°	3326.2	1066.2	112.6	69.6	60.4	40.1	38.3	34.8	26.6	23.2	22.7
75°	2658.7	653.5	66.2	52.3	40.1	28.4	28.4	24.9	18.0	15.1	15.1
77.5°	1837.5	341.8	38.8	33.6	23.8	16.8	18.6	15.1	8.7	7.0	7.0
80°	735.9	130.0	20.9	15.7	11.1	7.6	6.4	3.5	1.7	1.1	1.7
82.5°	146.9	34.2	7.0	4.1	4.1	1.7	0.0	0.0	0.0	0.0	0.0
85°	37.7	7.6	1.7	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	0.0	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)