

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: P959317

Luminaire Tested: **NAV-SB1A-740-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959317
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3944.2 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

Input Watts (W): 30.9
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



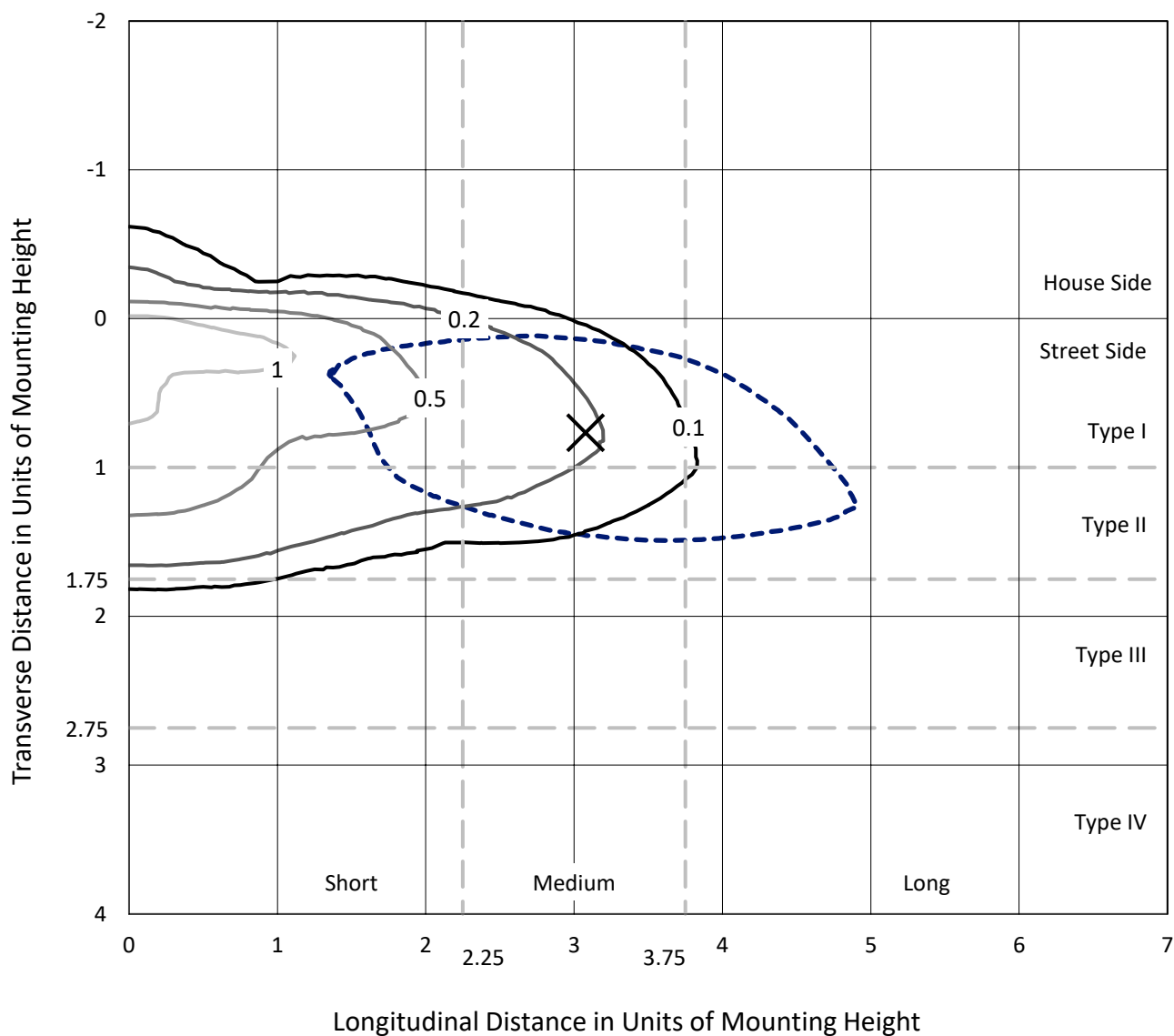
REPORT NUMBER: P959317

CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

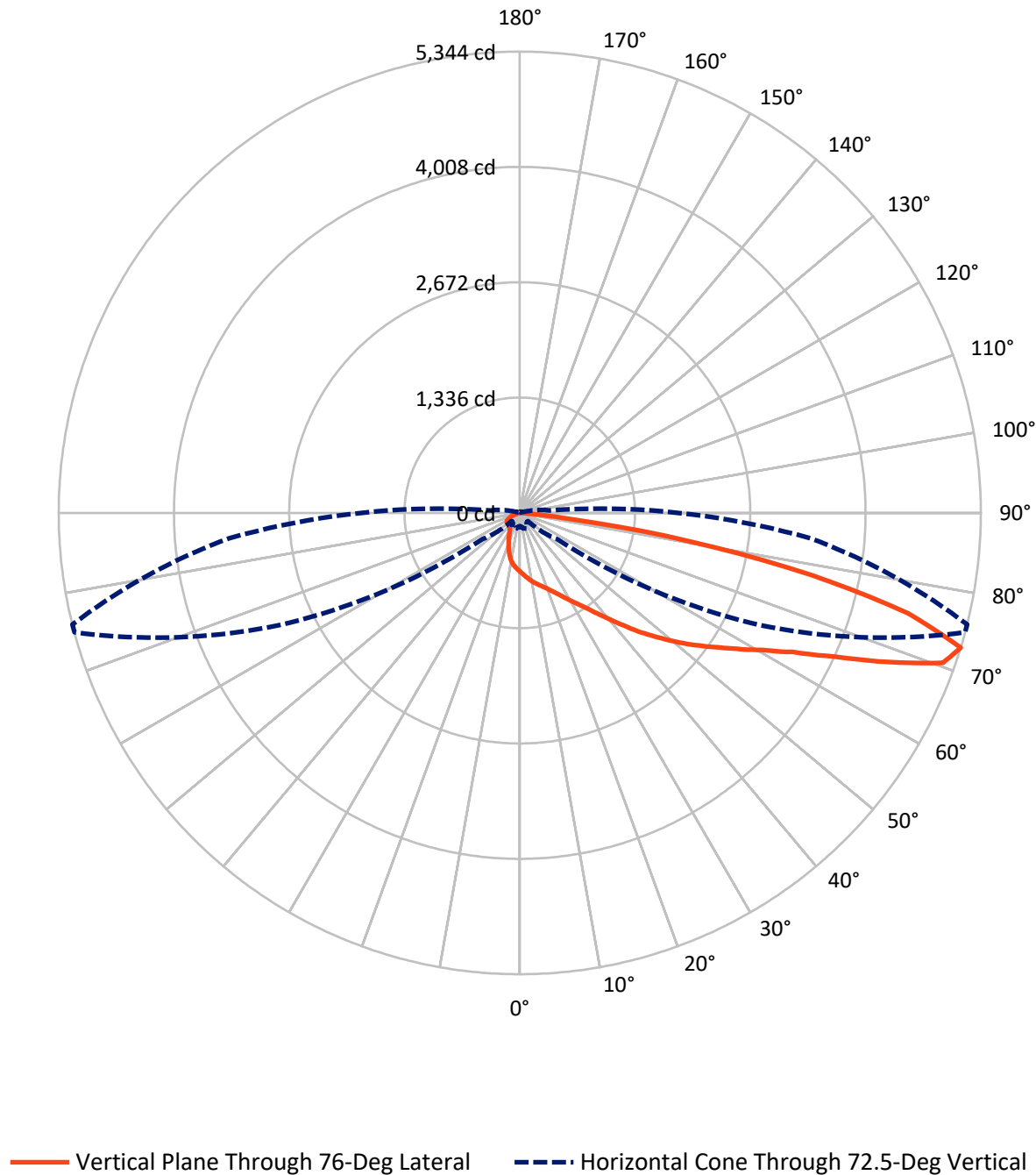
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
Type II - Medium - N/A

REPORT NUMBER: P959317
CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P959317

CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	403.7	0.0	403.7
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	3540.5	0.0	3540.5
	% Fixture	89.8	0.0	89.8
Total	Lumens	3944.2	0.0	3944.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	1.6
10°-20°	166.2	4.2
20°-30°	263.1	6.7
30°-40°	407.0	10.3
40°-50°	618.2	15.7
50°-60°	852.2	21.6
60°-70°	900.3	22.8
70°-80°	617.6	15.7
80°-90°	57.5	1.5
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°	3944.2	100.0
0°-180°	3944.2	100.0

Coefficient of Utilization



REPORT NUMBER: P959317

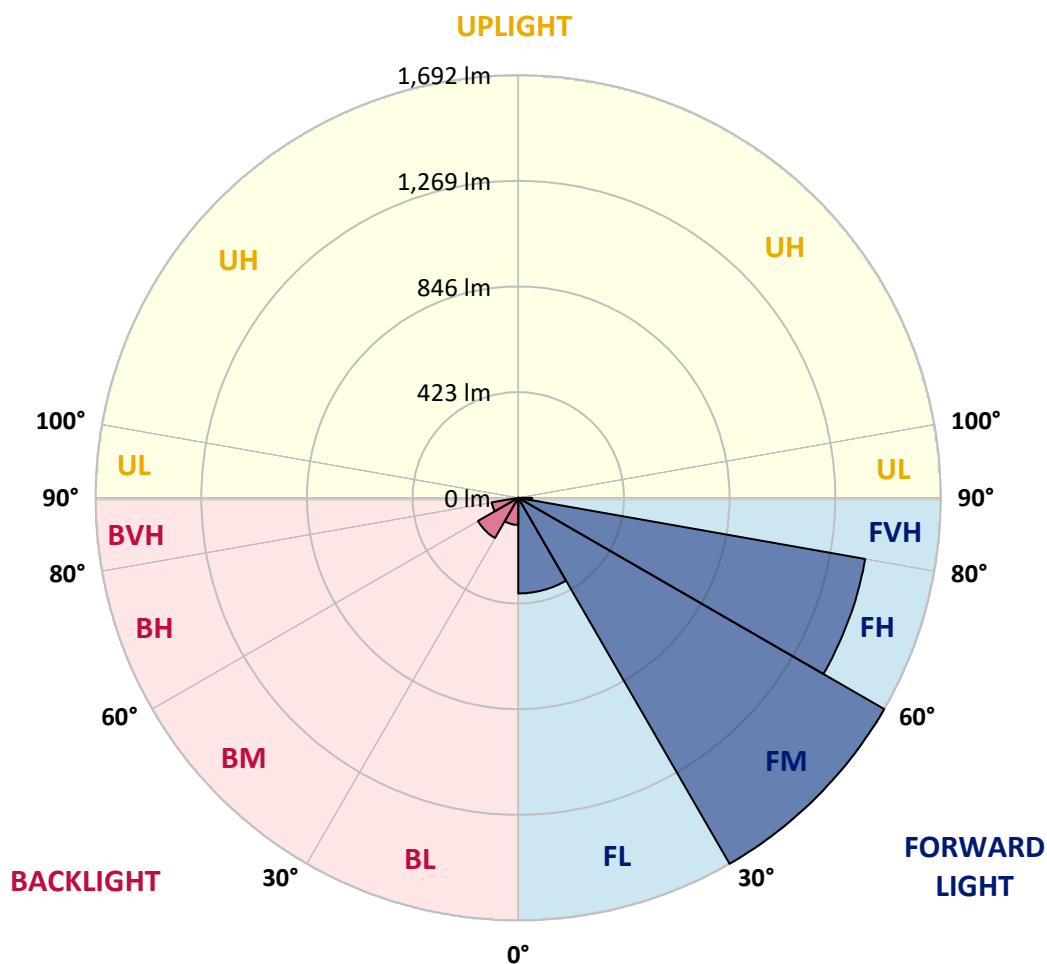
CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	382.8	9.7			
FM	(30°-60°)	1691.6	42.9			
FH	(60°-80°)	1410.2	35.8			G1/1800
FVH	(80°-90°)	55.9	1.4			G1/100
BL	(0°-30°)	108.5	2.8	B0/110		
BM	(30°-60°)	185.9	4.7	B0/220		
BH	(60°-80°)	107.8	2.7	B0/110		G0/110
BVH	(80°-90°)	1.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium



REPORT NUMBER: P959317

CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6
2.5°	792.4	781.9	783.9	773.5	768.5	756.9	744.6	728.4	710.5	710.5	693.1
5°	875.8	869.1	869.1	856.9	847.4	828.9	807.0	778.6	744.8	741.5	708.5
7.5°	926.9	922.9	925.4	918.3	910.6	891.4	865.3	828.2	780.3	776.2	726.6
10°	937.0	936.6	943.8	945.9	951.0	941.3	918.0	875.2	815.4	809.5	742.2
12.5°	898.3	893.4	911.1	931.8	960.9	974.1	962.0	918.3	847.4	839.2	756.9
15°	834.9	835.9	852.8	884.8	933.4	979.9	995.5	960.2	879.9	870.1	770.6
17.5°	798.5	794.7	809.2	837.9	891.6	957.5	1011.2	999.4	914.4	903.4	784.7
20°	794.2	793.9	797.2	810.3	851.3	925.2	1009.3	1037.5	955.1	942.3	804.9
22.5°	824.4	823.9	821.0	818.5	829.7	893.7	1001.6	1073.8	1003.7	989.9	833.5
25°	870.6	869.9	865.5	849.9	839.0	876.8	994.5	1107.6	1061.3	1045.9	868.4
27.5°	927.2	926.7	918.8	895.2	866.8	878.3	990.9	1142.4	1127.8	1112.7	908.6
30°	996.5	995.5	979.2	945.9	908.8	902.6	995.8	1181.5	1197.1	1185.6	954.9
32.5°	1083.5	1080.8	1059.2	1009.1	957.1	935.1	1005.0	1221.7	1279.3	1268.5	1016.8
35°	1150.9	1146.5	1134.0	1089.7	1013.2	975.1	1026.4	1269.3	1378.0	1368.6	1095.8
37.5°	1208.7	1204.3	1194.0	1157.7	1093.5	1025.9	1061.0	1332.7	1494.7	1490.0	1192.3
40°	1271.1	1263.9	1259.0	1220.2	1162.0	1099.4	1110.4	1406.9	1629.0	1629.5	1308.2
42.5°	1319.2	1316.4	1316.9	1287.0	1228.4	1186.4	1175.9	1490.6	1790.0	1794.8	1447.6
45°	1360.4	1358.0	1367.6	1346.5	1295.1	1243.4	1252.7	1585.3	1966.0	1976.0	1603.7
47.5°	1392.1	1394.6	1408.2	1394.6	1364.5	1283.6	1320.7	1687.4	2151.0	2152.2	1764.8
50°	1423.8	1424.9	1447.4	1440.7	1428.4	1334.6	1383.4	1801.4	2345.9	2348.2	1915.5
52.5°	1433.8	1432.2	1468.1	1484.5	1485.0	1397.5	1464.5	1925.8	2537.1	2544.5	2070.6
55°	1382.6	1386.9	1444.8	1511.4	1537.7	1484.5	1574.0	2083.1	2740.6	2743.7	2224.1
57.5°	1132.4	1156.4	1284.4	1438.7	1571.7	1609.0	1731.3	2267.1	2975.8	2973.0	2379.6
60°	687.3	715.9	868.9	1206.6	1460.6	1734.2	1963.2	2552.1	3232.7	3224.8	2537.1
62.5°	384.3	393.0	441.9	722.3	1110.9	1654.6	2189.6	2918.3	3577.6	3550.7	2691.9
65°	283.2	286.1	297.6	353.8	546.0	1272.6	2140.0	3356.1	4062.2	4014.3	2877.3
67.5°	246.1	249.0	260.2	267.8	243.8	668.5	1763.1	3598.9	4677.5	4614.9	3128.3
70°	207.3	208.8	226.9	232.1	174.5	254.3	1132.6	3523.8	5247.1	5202.3	3397.8
72.5°	154.6	160.7	187.1	199.3	139.9	135.1	533.2	3080.9	5343.5	5344.0	3379.5
75°	104.9	110.5	140.7	164.0	107.9	94.7	215.1	2300.6	4653.0	4653.0	2962.6
77.5°	71.6	76.3	98.0	128.7	81.9	65.0	111.5	1460.1	3338.1	3455.6	2111.6
80°	31.8	34.5	63.2	93.4	62.2	41.9	63.2	799.5	2018.6	1993.8	827.7
82.5°	15.6	17.9	40.4	58.3	40.2	25.8	33.2	380.2	654.3	621.8	129.3
85°	3.1	4.1	21.7	24.8	18.7	11.5	12.5	117.0	78.8	90.1	27.4
87.5°	0.0	0.0	6.7	4.6	2.0	2.6	2.6	10.5	6.1	7.2	7.2
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: P959317

CATALOG NUMBER: NAV-SB1A-740-U-SL2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6	681.6
2.5°	683.9	674.4	653.7	633.2	612.2	593.1	579.7	566.4	558.3	554.7	555.2
5°	689.3	670.0	626.6	581.1	536.0	492.0	459.0	428.0	418.3	402.2	403.2
7.5°	697.7	666.5	597.9	521.2	448.0	383.6	336.9	299.8	285.1	270.7	270.4
10°	703.4	659.9	560.1	457.5	358.4	286.1	241.5	214.6	204.9	196.3	196.0
12.5°	705.6	647.6	516.6	386.1	278.9	218.0	191.4	178.9	175.5	172.4	172.4
15°	707.7	635.5	467.9	317.2	220.3	182.4	171.9	167.8	165.5	163.5	163.5
17.5°	709.5	620.2	412.5	257.9	186.0	168.1	163.0	158.7	156.8	154.6	154.6
20°	715.7	605.4	362.8	212.9	167.3	157.8	152.2	147.6	146.1	144.5	144.8
22.5°	727.1	593.4	314.7	182.4	156.1	147.4	140.2	135.1	134.1	133.0	132.2
25°	741.0	578.5	269.4	162.8	145.0	135.3	127.4	123.1	122.1	122.3	121.8
27.5°	758.6	562.1	230.5	150.2	135.3	124.1	115.1	111.8	112.3	113.4	112.9
30°	778.1	547.0	200.1	141.4	126.7	114.1	105.2	102.8	104.7	106.2	105.7
32.5°	807.0	533.7	178.9	134.6	119.0	105.9	98.8	95.9	98.0	100.0	99.5
35°	846.3	527.1	166.8	128.7	112.3	99.5	92.4	90.3	92.4	92.9	92.7
37.5°	894.7	526.5	161.7	123.8	106.2	94.2	86.2	85.5	87.0	87.2	86.7
40°	957.1	529.8	157.8	120.2	99.7	88.0	80.6	79.8	80.4	82.1	81.9
42.5°	1036.2	543.7	152.5	115.6	92.9	81.9	76.0	74.2	73.9	76.0	75.7
45°	1135.5	574.1	145.3	108.2	86.7	76.8	70.8	68.8	68.1	68.6	69.3
47.5°	1243.7	611.5	138.2	101.3	82.4	72.7	66.7	64.3	62.9	62.9	62.9
50°	1348.6	653.7	133.2	94.2	79.3	68.8	62.4	59.9	57.8	57.3	57.1
52.5°	1452.5	695.2	129.5	87.0	75.7	64.0	58.3	55.6	53.2	52.2	51.7
55°	1547.1	734.5	122.8	80.1	71.1	58.8	54.2	51.5	48.6	46.8	46.0
57.5°	1637.9	767.3	110.5	72.9	64.0	54.0	49.9	46.8	43.5	41.2	40.2
60°	1720.6	784.2	95.2	65.3	56.8	48.9	45.0	42.2	37.8	34.0	33.0
62.5°	1783.5	777.6	78.5	56.6	49.4	44.3	39.4	36.6	31.5	26.9	25.1
65°	1848.1	741.2	62.7	47.4	43.3	38.1	33.0	30.2	24.3	19.5	18.1
67.5°	1931.7	663.7	49.4	39.4	37.3	30.2	25.8	24.1	20.0	15.4	14.3
70°	1985.4	515.6	38.3	32.0	30.7	22.0	20.0	19.7	15.9	11.8	10.5
72.5°	1838.0	337.9	29.4	24.3	22.0	14.3	15.4	15.4	11.5	7.9	6.9
75°	1534.3	197.8	21.2	17.4	12.5	9.2	10.5	10.5	7.2	3.8	3.1
77.5°	1095.8	105.4	14.0	10.8	6.4	4.1	5.6	5.3	2.3	0.2	0.0
80°	419.1	36.3	6.7	4.3	1.7	0.7	0.5	0.2	0.2	0.0	0.0
82.5°	64.0	9.4	1.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	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)