

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: P965126

Luminaire Tested: **NAV-SB3D-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965126
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28032.7 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 218.1
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

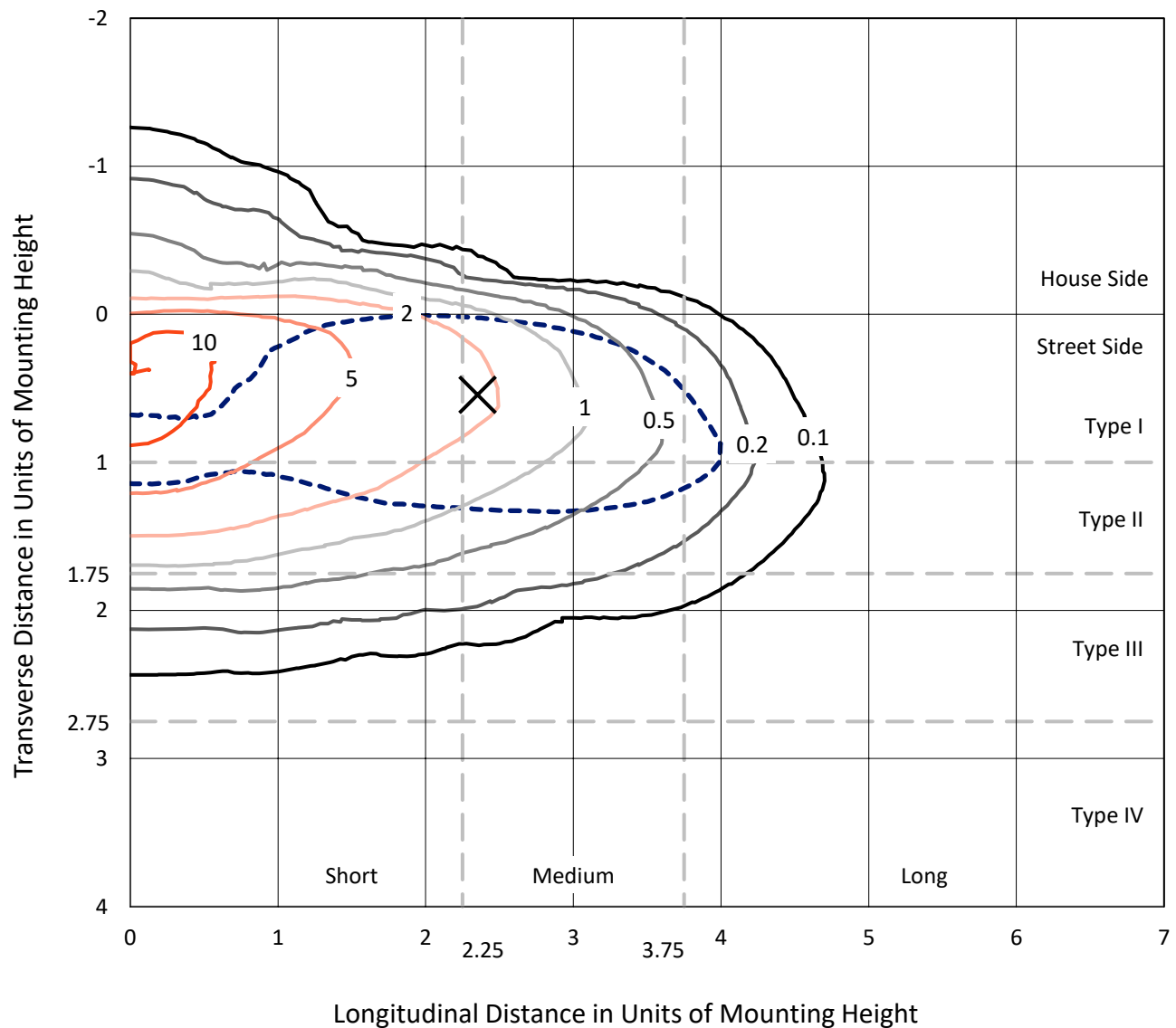


REPORT NUMBER: P965126

CATALOG NUMBER: NAV-SB3D-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

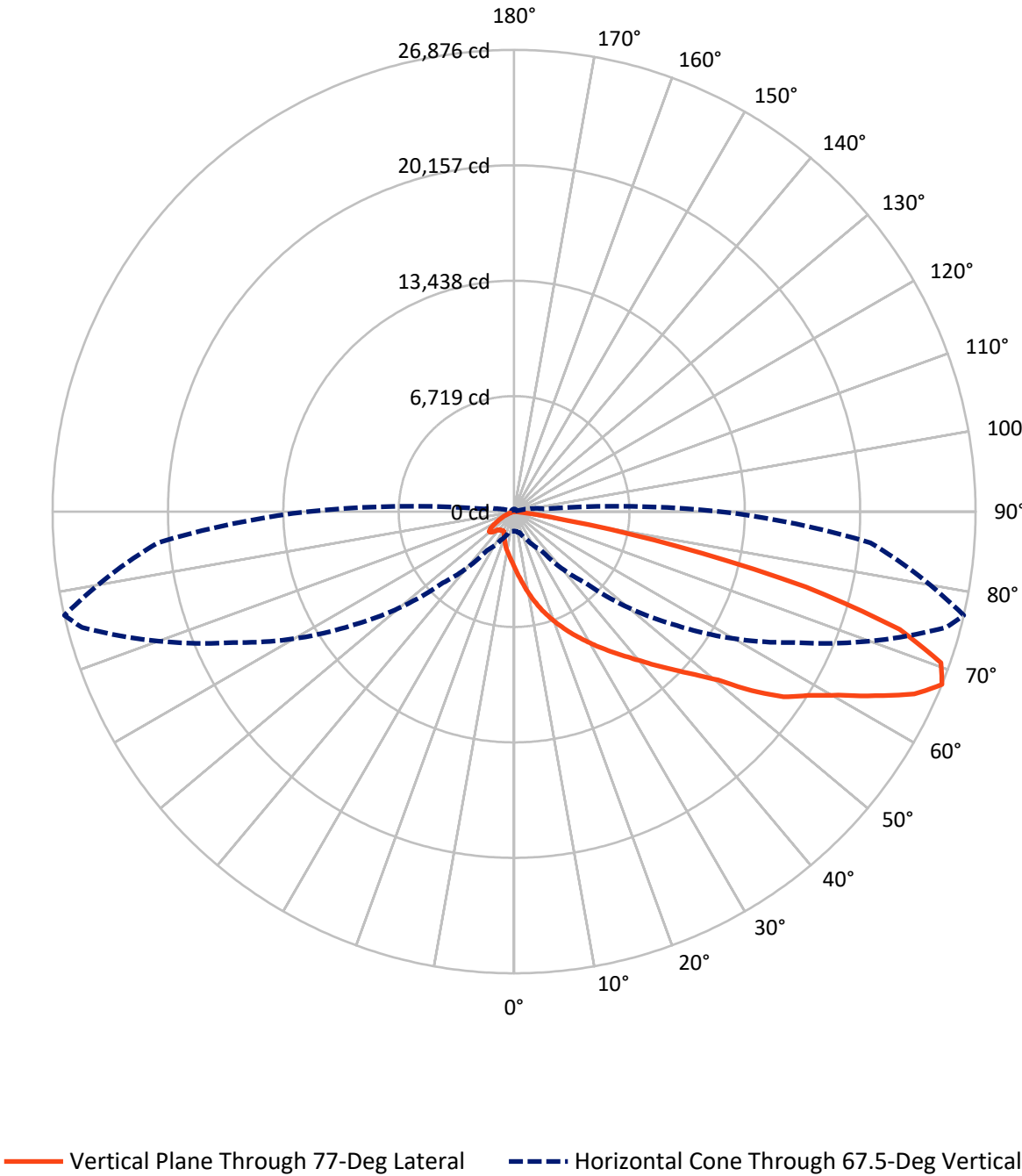
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
Type II - Medium - N/A

REPORT NUMBER: P965126
CATALOG NUMBER: NAV-SB3D-740-U-T2R-HSS

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2062.4	0.0	2062.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	25970.3	0.0	25970.3
	% Fixture	92.6	0.0	92.6
Total	Lumens	28032.7	0.0	28032.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.9	1.2
10°-20°	1155.4	4.1
20°-30°	2229.6	8.0
30°-40°	3870.7	13.8
40°-50°	5620.1	20.0
50°-60°	6454.0	23.0
60°-70°	5603.3	20.0
70°-80°	2639.2	9.4
80°-90°	130.5	0.5
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°	28032.7	100.0
0°-180°	28032.7	100.0

Coefficient of Utilization



REPORT NUMBER: P965126

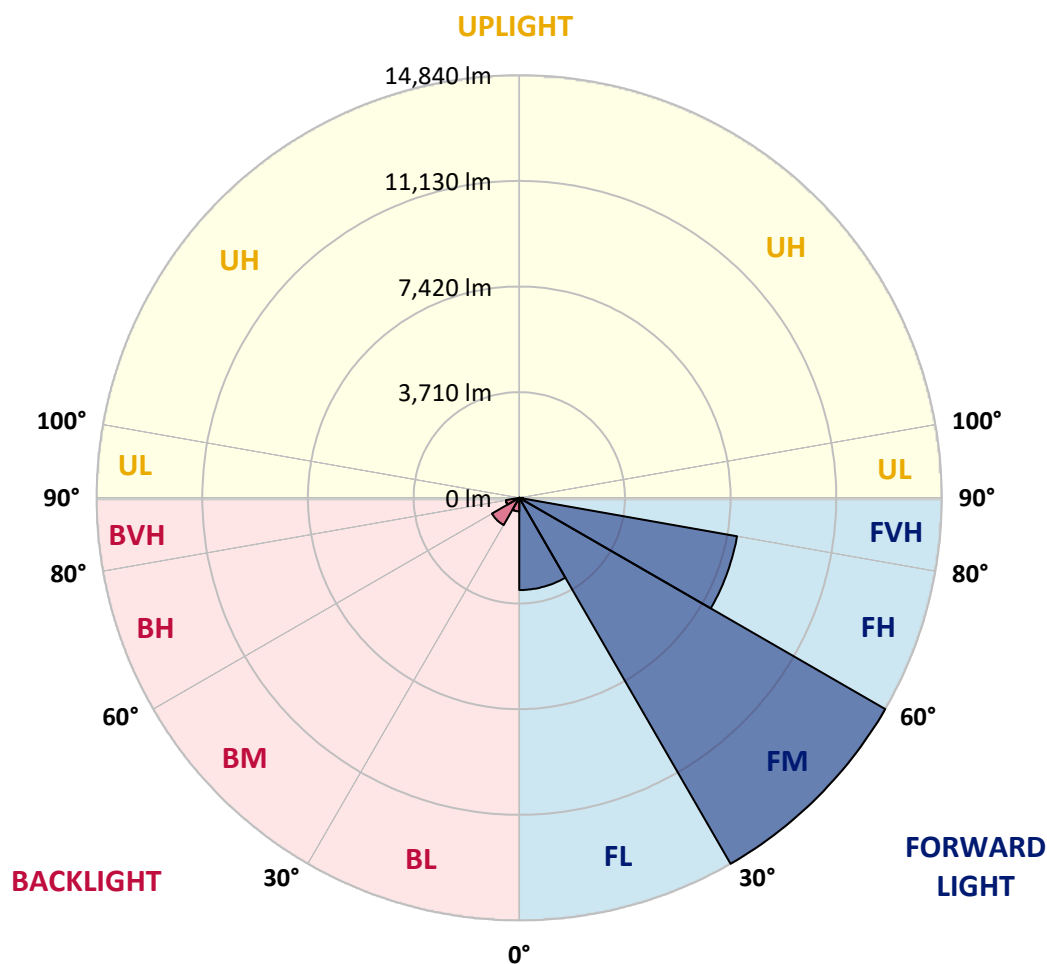
CATALOG NUMBER: NAV-SB3D-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3237.5	11.5			
FM	(30°-60°)	14839.8	52.9			
FH	(60°-80°)	7765.0	27.7			G4/12000
FVH	(80°-90°)	128.1	0.5			G2/225
BL	(0°-30°)	477.5	1.7	B1/500		
BM	(30°-60°)	1105.1	3.9	B2/2500		
BH	(60°-80°)	477.5	1.7	B1/500		G1/500
BVH	(80°-90°)	2.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Medium



REPORT NUMBER: P965126

CATALOG NUMBER: NAV-SB3D-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5
2.5°	4475.5	4503.3	4463.3	4386.7	4271.8	4197.0	4014.2	3841.8	3650.3	3589.4	3398.0
5°	5455.6	5479.9	5434.7	5351.1	5197.9	5051.7	4811.5	4451.2	4076.8	3956.7	3617.3
7.5°	6181.5	6195.3	6178.0	6101.3	5955.1	5789.7	5521.7	5095.2	4539.9	4407.6	3887.1
10°	6703.7	6748.9	6743.7	6714.1	6616.6	6482.6	6197.0	5711.4	5058.7	4888.0	4191.7
12.5°	7050.1	7100.6	7130.1	7196.3	7191.1	7105.8	6855.1	6341.6	5575.7	5375.4	4534.7
15°	7151.0	7205.0	7318.2	7471.3	7607.1	7650.6	7474.8	6959.5	6144.9	5888.9	4886.3
17.5°	7093.6	7177.2	7313.0	7554.9	7852.5	8049.2	8030.2	7556.6	6661.9	6369.5	5231.0
20°	7220.6	7300.8	7407.0	7610.6	7957.0	8313.9	8456.6	8127.6	7175.4	6869.0	5593.0
22.5°	7924.0	7910.0	7920.5	7953.5	8160.6	8514.1	8808.2	8646.4	7683.7	7370.4	5976.1
25°	9038.0	8975.3	8869.1	8689.8	8637.7	8808.2	9114.6	9105.9	8219.9	7883.9	6367.7
27.5°	10315.7	10305.2	10056.4	9624.6	9380.9	9314.8	9461.1	9553.3	8750.8	8392.2	6761.1
30°	11539.4	11567.3	11231.3	10750.9	10303.5	10044.2	9911.9	9978.1	9290.4	8940.6	7166.7
32.5°	12604.8	12634.5	12268.8	11706.6	11153.0	10839.7	10561.2	10397.5	9878.7	9497.5	7612.4
35°	13504.8	13534.4	13114.9	12493.4	11903.3	11619.5	11304.5	10857.1	10470.7	10115.5	8108.5
37.5°	14309.0	14300.3	13738.1	13111.4	12531.8	12307.2	12141.7	11422.8	11079.9	10737.0	8658.5
40°	14784.3	14820.8	14340.4	13649.3	13087.0	12923.4	12912.9	12124.4	11783.2	11450.7	9260.9
42.5°	14923.5	14988.0	14639.8	14072.3	13562.2	13384.7	13658.0	12883.3	12601.3	12277.6	9941.5
45°	14672.9	14735.5	14577.1	14183.6	13886.0	13771.1	14298.5	13670.1	13475.2	13154.8	10709.1
47.5°	13941.7	14020.1	14058.4	13974.7	13971.3	14087.9	14873.1	14498.7	14512.7	14185.4	11598.7
50°	12526.5	12658.7	13010.4	13306.3	13764.2	14338.6	15431.8	15397.0	15682.5	15400.5	12758.0
52.5°	9953.7	10141.7	11353.2	12162.6	13191.4	14291.6	16046.3	16838.3	17734.9	17322.3	14392.5
55°	7998.8	7998.8	8984.0	10498.5	12073.9	13981.7	16314.4	17774.8	19132.6	19035.2	15543.2
57.5°	6520.8	6599.3	7227.6	8566.2	10456.7	13243.7	16479.7	18363.3	20258.9	20187.6	16667.7
60°	4024.7	4193.5	5380.6	6702.0	8616.8	11929.4	16375.3	18958.6	21625.4	21682.8	18022.1
62.5°	2266.5	2329.1	2858.3	4821.9	6700.2	10162.6	15576.3	19291.1	23373.2	23616.8	19418.1
65°	1565.0	1596.2	1799.9	3001.1	4644.4	8091.0	14014.8	19084.0	25124.4	25617.0	20601.9
67.5°	1136.7	1152.4	1279.4	1833.0	2755.6	5866.4	11567.3	18039.5	26052.1	26875.5	20828.2
70°	873.8	884.3	976.5	1204.6	1627.6	3620.8	8400.9	15962.7	25380.2	26363.7	19668.8
72.5°	710.2	720.7	792.0	891.2	1079.2	2141.1	5091.7	12963.4	22414.0	23475.9	16744.3
75°	598.8	612.7	677.1	741.6	846.0	1375.2	2388.4	9027.6	16855.7	17552.1	11643.9
77.5°	332.5	306.4	550.1	614.5	713.7	870.3	1117.6	5312.8	9440.1	9633.4	5166.6
80°	207.2	214.1	437.0	494.4	548.4	438.7	511.8	2045.4	3272.6	3109.0	1000.9
82.5°	12.2	27.9	336.0	356.9	376.0	188.0	193.2	694.5	788.5	724.2	177.5
85°	0.0	0.0	153.2	123.6	130.6	53.9	55.7	161.8	106.2	114.9	34.8
87.5°	0.0	0.0	0.0	3.5	0.0	5.2	10.5	13.9	5.2	7.0	12.2
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: P965126

CATALOG NUMBER: NAV-SB3D-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5	3232.5
2.5°	3276.1	3154.2	2907.1	2665.1	2468.4	2285.6	2155.1	2031.4	1968.8	1965.3	1961.8
5°	3375.3	3119.5	2625.0	2188.2	1836.5	1554.5	1371.8	1241.2	1175.1	1152.4	1148.9
7.5°	3514.6	3129.8	2377.9	1770.4	1356.1	1114.1	1009.6	967.9	954.0	938.3	934.8
10°	3690.4	3154.2	2156.8	1425.7	1068.9	947.0	905.2	887.8	877.3	866.9	863.5
12.5°	3887.1	3176.9	1937.5	1183.7	940.0	877.3	847.8	826.9	812.9	800.7	797.2
15°	4078.6	3190.8	1709.4	1014.9	873.8	823.4	792.0	769.4	750.3	736.4	734.6
17.5°	4268.3	3210.0	1495.3	913.9	819.9	769.4	738.1	710.2	694.5	678.9	677.1
20°	4478.9	3206.5	1293.3	842.6	766.0	715.4	682.3	656.3	640.6	623.2	621.5
22.5°	4673.9	3189.1	1115.8	781.6	710.2	661.5	624.9	598.8	583.1	569.2	567.4
25°	4898.5	3175.1	967.9	725.9	658.0	609.3	569.2	544.9	527.5	515.3	513.5
27.5°	5114.3	3154.2	860.0	675.4	607.5	560.6	522.2	494.4	478.7	470.0	470.0
30°	5326.7	3149.0	819.9	626.7	562.3	515.3	476.9	450.9	438.7	435.2	433.5
32.5°	5582.6	3162.9	837.3	609.3	520.5	473.4	437.0	417.8	405.6	405.6	405.6
35°	5855.9	3159.5	863.5	624.9	492.6	431.7	403.8	391.7	379.5	379.5	379.5
37.5°	6198.8	3164.7	884.3	651.1	482.2	396.9	381.2	365.5	358.5	358.5	358.5
40°	6710.6	3337.0	873.8	673.6	478.7	372.5	341.2	336.0	330.8	330.8	330.8
42.5°	7337.3	3711.3	887.8	675.4	476.9	355.2	313.3	323.8	311.6	309.9	308.1
45°	8023.2	4120.4	976.5	638.9	475.2	346.4	299.4	311.6	292.4	292.4	292.4
47.5°	8703.8	4526.0	1067.1	586.6	470.0	344.7	287.2	280.2	275.0	276.8	276.8
50°	9642.1	4856.8	1101.9	515.3	457.9	341.2	264.6	266.3	262.8	266.3	266.3
52.5°	10663.9	4926.4	1060.2	435.2	423.0	330.8	249.0	255.8	254.2	257.6	257.6
55°	11301.0	4851.5	875.6	362.0	369.0	288.9	233.3	247.2	247.2	247.2	247.2
57.5°	11959.0	4533.0	621.5	294.2	306.4	236.8	219.4	238.5	236.8	235.0	235.0
60°	12432.5	4017.7	409.1	242.0	243.7	195.0	203.7	224.6	222.8	214.1	214.1
62.5°	12785.8	3448.4	262.8	205.4	186.2	175.8	186.2	203.7	196.7	177.5	174.0
65°	12745.8	2659.9	201.9	175.8	153.2	153.2	161.8	177.5	156.6	125.4	121.9
67.5°	12002.5	1799.9	167.1	148.0	128.8	127.1	134.1	148.0	134.1	106.2	102.7
70°	10674.3	1176.8	134.1	114.9	102.7	94.0	107.9	127.1	113.2	85.3	81.8
72.5°	8663.7	717.2	101.0	83.5	74.8	60.9	85.3	104.4	90.5	62.6	59.1
75°	5605.2	365.5	69.6	53.9	40.1	36.6	62.6	78.3	62.6	38.3	33.1
77.5°	2144.6	153.2	38.3	24.4	20.9	17.4	34.8	47.0	26.1	8.7	7.0
80°	412.6	64.4	19.2	12.2	10.5	7.0	5.2	3.5	0.0	0.0	0.0
82.5°	71.3	20.9	7.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	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)