

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: McGRAW-EDISON

Report Number: P833180

Luminaire Tested: **TTN-D1-735-U-RW-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833180
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D1-735-U-RW-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3651.8 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

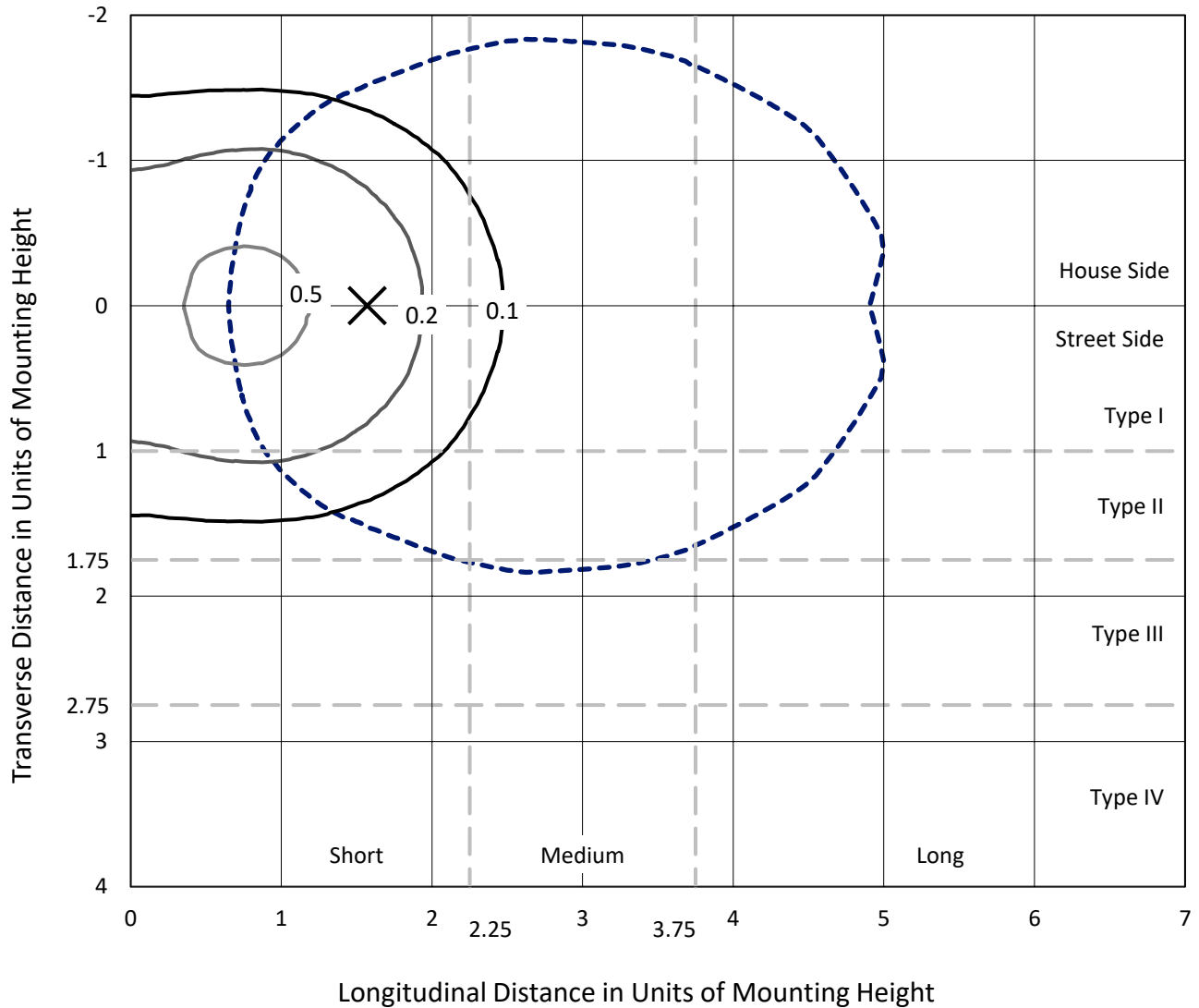
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

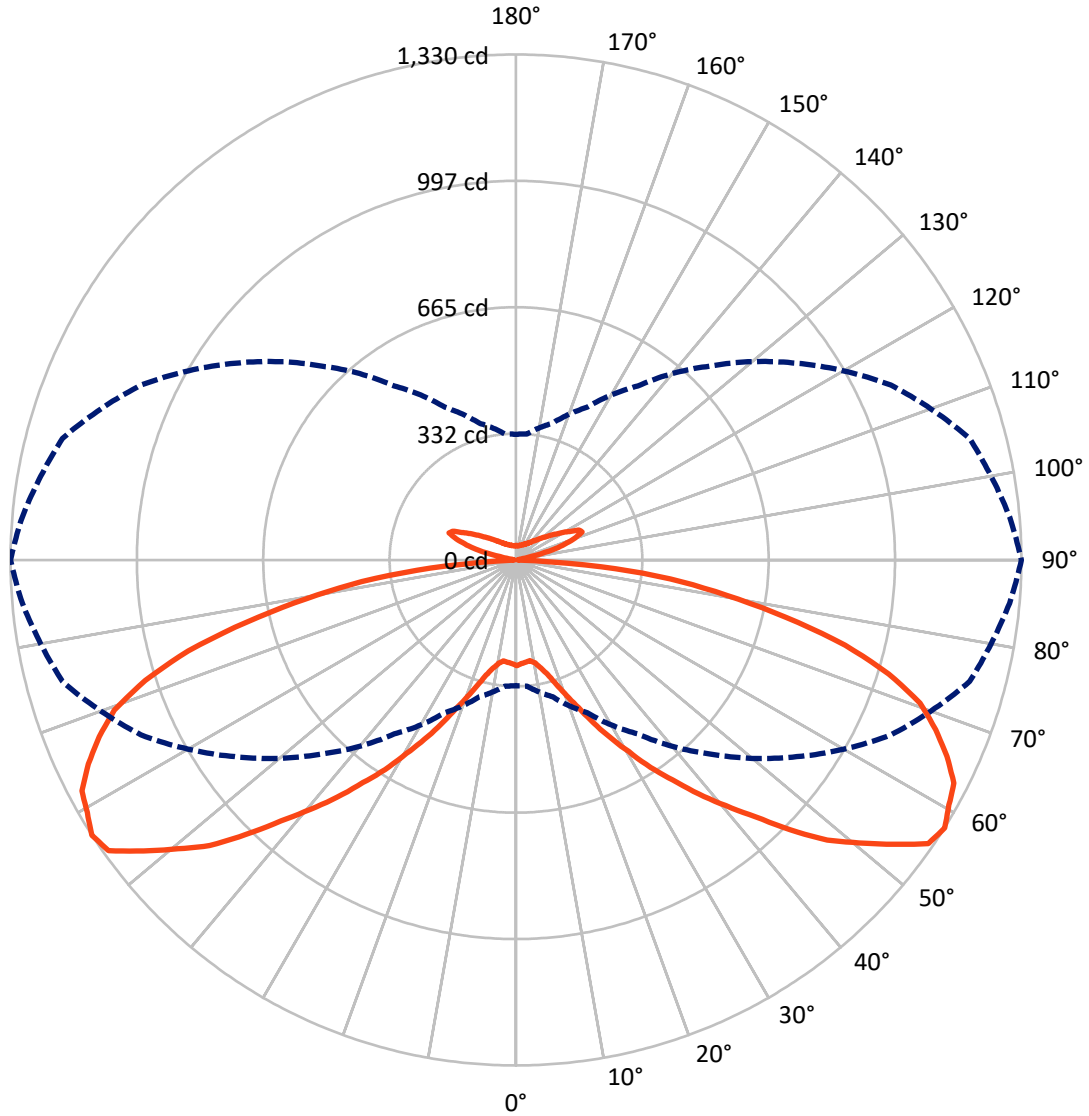
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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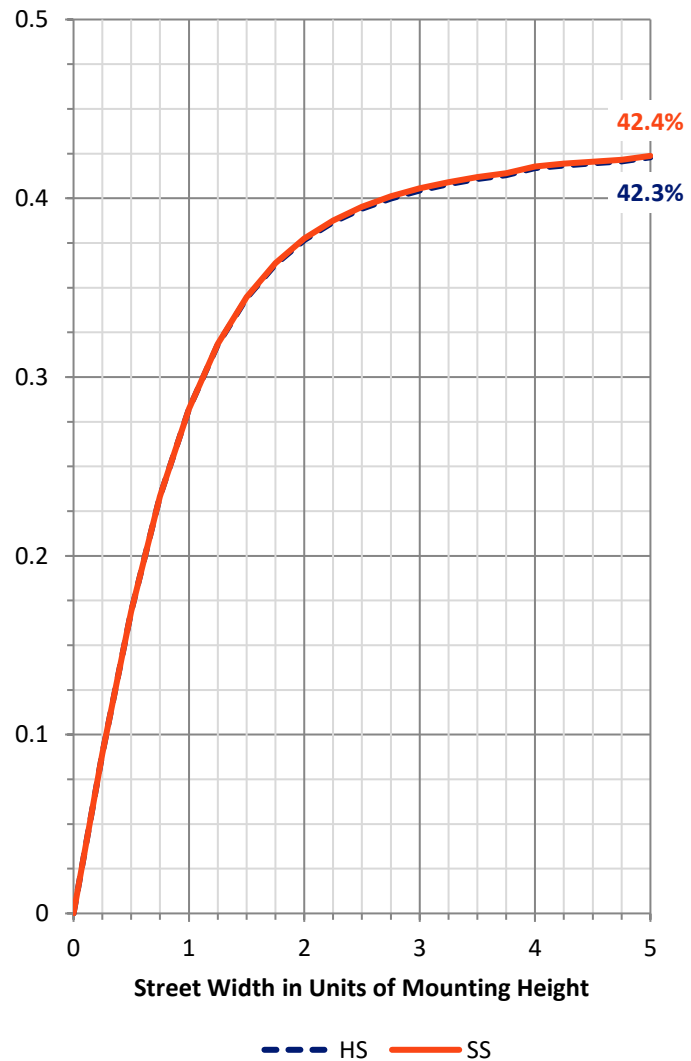
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1554.4	271.5	1825.9
	% Fixture	42.6	7.4	50.0
Street Side	Lumens	1554.4	271.5	1825.9
	% Fixture	42.6	7.4	50.0
Total	Lumens	3108.7	543.0	3651.8
	% Fixture	85.1	14.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	0.7
10°-20°	83.4	2.3
20°-30°	173.9	4.8
30°-40°	311.9	8.5
40°-50°	498.3	13.6
50°-60°	682.2	18.7
60°-70°	703.7	19.3
70°-80°	500.4	13.7
80°-90°	128.8	3.5
90°-100°	12.1	0.3
100°-110°	123.2	3.4
110°-120°	180.1	4.9
120°-130°	104.5	2.9
130°-140°	55.4	1.5
140°-150°	32.9	0.9
150°-160°	20.2	0.6
160°-170°	11.0	0.3
170°-180°	3.6	0.1
0°-90°	3108.7	85.1
0°-180°	3651.8	100.0

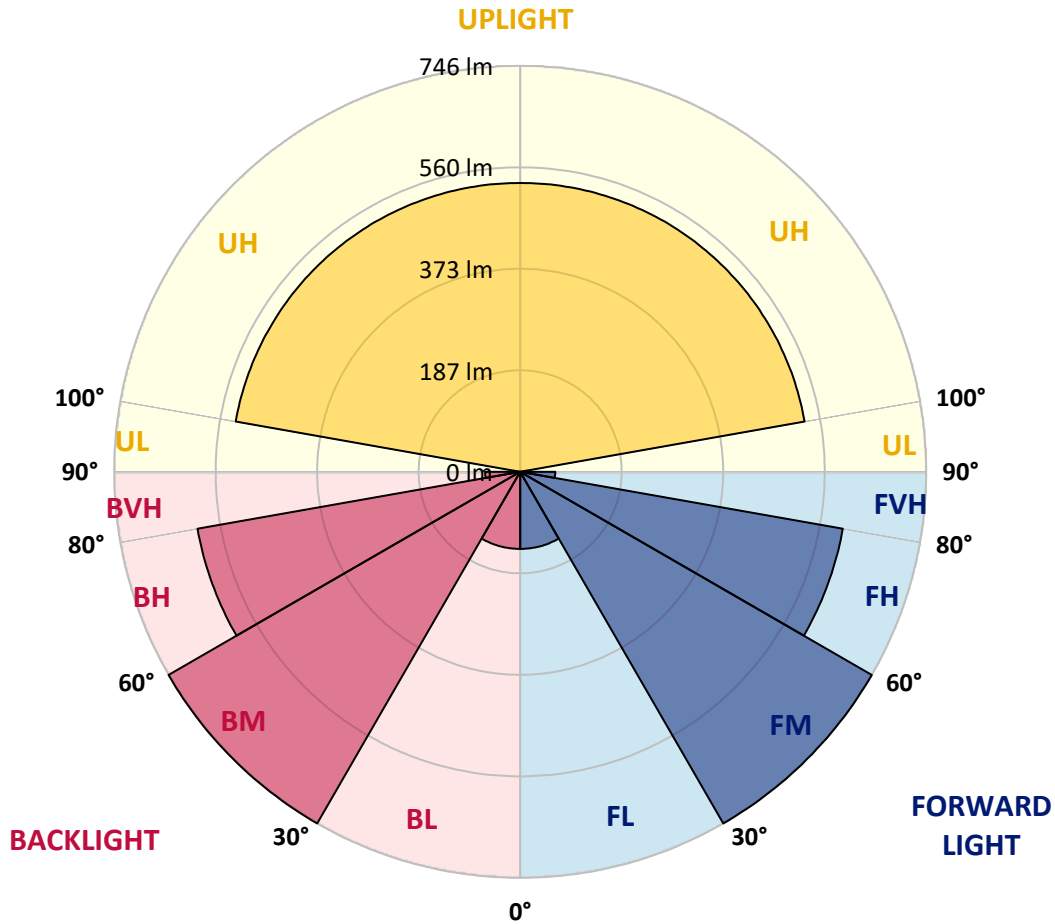


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	141.7	3.9			
FM (30°-60°)	746.2	20.4			
FH (60°-80°)	602.1	16.5			G0/660
FVH (80°-90°)	64.4	1.8			G1/100
BL (0°-30°)	141.7	3.9	B1/500		
BM (30°-60°)	746.2	20.4	B1/1000		
BH (60°-80°)	602.1	16.5	B2/1000		G2/1000
BVH (80°-90°)	64.4	1.8			G1/100
UL (90°-100°)	12.1	0.3		U2/50	
UH (100°-180°)	530.9	14.5		U4/1000	

BUG Rating: B2-U4-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0
2.5°	278.0	278.0	275.4	275.4	275.4	272.8	272.8	272.8	272.8	270.2	272.8
5°	278.0	278.0	278.0	278.0	275.4	272.8	272.8	272.8	270.2	270.2	270.2
7.5°	275.4	275.4	275.4	275.4	272.8	270.2	270.2	270.2	267.5	267.5	267.5
10°	272.8	275.4	272.8	272.8	270.2	270.2	272.8	272.8	275.4	275.4	275.4
12.5°	270.2	270.2	270.2	272.8	272.8	275.4	280.6	285.9	288.5	291.1	291.1
15°	270.2	270.2	272.8	275.4	280.6	285.9	293.8	301.6	306.9	312.1	312.1
17.5°	270.2	270.2	272.8	280.6	288.5	299.0	312.1	322.6	333.1	341.0	343.6
20°	270.2	270.2	275.4	285.9	301.6	317.4	335.7	351.5	367.2	380.3	380.3
22.5°	272.8	275.4	280.6	293.8	317.4	341.0	364.6	388.2	406.5	422.3	422.3
25°	278.0	278.0	285.9	306.9	335.7	367.2	401.3	430.1	453.8	474.7	474.7
27.5°	280.6	283.3	293.8	320.0	356.7	396.1	443.3	477.4	508.8	527.2	529.8
30°	285.9	288.5	304.3	330.5	375.1	424.9	480.0	527.2	561.3	579.7	584.9
32.5°	288.5	291.1	312.1	343.6	393.4	451.1	514.1	574.4	621.6	642.6	650.5
35°	296.4	299.0	320.0	356.7	414.4	480.0	553.4	624.2	679.3	705.5	710.8
37.5°	304.3	306.9	327.9	369.8	435.4	511.5	595.4	676.7	739.6	771.1	781.6
40°	309.5	312.1	335.7	385.6	459.0	545.6	642.6	731.8	802.6	841.9	849.8
42.5°	317.4	320.0	346.2	398.7	480.0	579.7	692.4	792.1	868.2	912.8	923.2
45°	325.2	327.9	356.7	414.4	503.6	616.4	742.3	862.9	949.5	1001.9	1012.4
47.5°	333.1	335.7	367.2	430.1	527.2	653.1	794.7	925.9	1030.8	1080.6	1101.6
50°	335.7	341.0	372.4	440.6	542.9	684.6	839.3	988.8	1099.0	1164.5	1169.8
52.5°	338.3	343.6	377.7	448.5	556.0	708.2	876.0	1041.3	1169.8	1248.5	1243.2
55°	341.0	341.0	377.7	448.5	561.3	723.9	902.3	1075.4	1217.0	1280.0	1316.7
57.5°	330.5	333.1	372.4	443.3	558.7	721.3	902.3	1088.5	1235.4	1303.6	1329.8
60°	317.4	322.6	359.3	430.1	548.2	713.4	897.0	1083.2	1243.2	1316.7	1308.8
62.5°	299.0	309.5	341.0	411.8	532.4	695.1	889.1	1070.1	1224.9	1300.9	1293.1
65°	278.0	288.5	317.4	393.4	498.3	650.5	847.2	1043.9	1175.0	1261.6	1245.9
67.5°	257.0	264.9	293.8	362.0	459.0	603.3	792.1	986.2	1104.2	1198.6	1190.8
70°	233.4	236.1	264.9	325.2	419.7	556.0	739.6	904.9	1041.3	1112.1	1127.8
72.5°	204.6	204.6	233.4	285.9	372.4	493.1	668.8	813.1	941.6	1001.9	1025.5
75°	167.9	170.5	194.1	241.3	312.1	422.3	569.2	716.0	823.6	886.5	894.4
77.5°	131.1	133.8	152.1	191.5	251.8	341.0	469.5	584.9	687.2	742.3	726.5
80°	94.4	97.0	110.2	139.0	186.2	254.4	362.0	464.2	537.7	582.3	561.3
82.5°	57.7	60.3	68.2	86.6	118.0	165.2	246.5	322.6	380.3	417.0	409.2
85°	28.9	28.9	34.1	39.3	49.8	73.4	118.0	162.6	207.2	233.4	225.6
87.5°	5.2	7.9	7.9	7.9	7.9	5.2	7.9	7.9	7.9	13.1	5.2
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)